

## 2006-2007 Undergraduate Calendar

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2006-2007 academic year, including the Summer Semester 2006, the Fall Semester 2006 and the Winter Semester 2007.

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# Disclaimer

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## University of Guelph 2006

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The University reserves the right to change without notice any information contained in this calendar, including 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.

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# Table of Contents

<b>I. Statement of Students' Academic Responsibilities .....</b>	<b>1</b>	<b>Submission of Documents .....</b>	<b>18</b>
<b>II. The University .....</b>	<b>2</b>	<b>Use of Animals in Teaching .....</b>	<b>19</b>
History .....	2	<b>V. International Study .....</b>	<b>20</b>
University of Guelph-Humber .....	2	Exchange Programs .....	20
Academic Organization .....	2	International Letter of Permission--L.O.P. ....	20
Learning Objectives .....	2	Semesters Abroad .....	20
Mission Statement .....	4	Study Abroad Programs .....	21
University Governance .....	4	<b>VI. Schedule of Fees .....</b>	<b>22</b>
<b>III. Schedule of Dates .....</b>	<b>5</b>	Changes in Fee Schedule .....	22
Summer Semester 2006 (12 Week Format) .....	5	Meal Plan Fees .....	22
Summer Session 2006 (6 Week Format) .....	5	Parking Fees .....	22
Fall Semester 2006 .....	5	Prior Learning Assessment .....	22
D.V.M. Fall Semester 2006 .....	6	Refunds .....	22
Winter Semester 2007 .....	6	Residence Fees .....	23
D.V.M. Winter Semester 2007 .....	6	Special University Fees .....	23
<b>IV. Admission Information .....</b>	<b>8</b>	University Fees .....	24
Admission Requirements to University Programs in 2006 .....	8	Tuition Fees .....	24
Semester One Admission .....	8	Other University Fees .....	25
Advanced Standing Admission .....	9	Student Organization Fees .....	25
Advanced Standing Entry Points .....	10	<b>VII. Academic Advising .....</b>	<b>26</b>
Application Procedures .....	10	Students .....	26
Applicants from Ontario Currently Enrolled in Secondary School .....	10	Faculty Advisors .....	26
Amendments to the Application Form .....	10	Program Counsellors .....	26
Applicants from Ontario Not Currently Enrolled in Secondary School .....	10	The Undergraduate Academic Information Centre .....	26
All Other External Students .....	10	The Council on Undergraduate Academic Advising .....	27
Applying From Outside Canada .....	10	Interpretation of University Academic Regulations .....	27
Applying From Another Campus of the University of Guelph .....	11	Non-Academic Counselling .....	27
Applying For Internal Transfer or Readmission .....	11	Program Approval .....	27
Articulation Agreements .....	11	<b>VIII. Undergraduate Degree Regulations and Procedures .....</b>	<b>28</b>
Alfred College .....	11	General Information .....	28
Algonquin College .....	11	Academic Consideration, Appeals and Petitions .....	28
Associate Diploma programs - University of Guelph .....	11	Process for Academic Consideration and Appeals .....	28
Holland College - P.E.I. ....	11	General Information for Academic Consideration and Appeals .....	28
Canadore College .....	11	Academic Consideration .....	28
Centennial College .....	11	Academic Accommodation of Religious Obligations .....	30
Conestoga College Institute of Technology and Advanced Learning .....	11	Academic Load .....	30
Fanshawe College .....	11	Full-time .....	30
Georgian College Institute of University Partnerships and Advanced Studies .....	11	Part-time .....	30
Humber College Institute of Technology and Advanced Learning .....	12	Academic Misconduct .....	30
Kemptville College .....	12	Education and Remediation .....	30
La Salle College - Quebec .....	12	Offences .....	30
Loyalist College .....	12	Penalties .....	31
Niagara College .....	12	Procedures .....	32
Nipissing University .....	12	Appeals .....	33
Northern Alberta Institute of Technology .....	12	Record of Academic Misconduct .....	33
Province of British Columbia .....	12	Guidelines for Penalties for Academic Misconduct .....	33
Red River College .....	12	Academic Review Sub-Committee Procedures .....	34
Redeemer College .....	12	Academic Standing .....	34
Seneca College .....	12	Eligible to Continue .....	34
Sir Sanford Fleming College .....	13	Probationary .....	34
Six Nations Polytechnic .....	13	Required to Withdraw .....	35
St. Lawrence College .....	13	Notes on Academic Structure .....	35
Associate Diploma Programs .....	13	Senate .....	35
Communication of Admission Decisions .....	13	Board of Undergraduate Studies .....	35
Co-operative Education .....	13	Program Committee .....	35
Deadline Dates - Advanced Standing, Non-Degree and Limited Enrolment Programs .....	13	Senate Committee on Student Petitions .....	35
English Proficiency .....	13	Adding Courses .....	35
1. Test of English as a Foreign Language (TOEFL) .....	13	Course Requisite(s) .....	35
2. International English Language Testing System (IELTS) .....	13	Distance Education Courses .....	35
3. The Michigan English Language Assessment Battery (MELAB) .....	14	Program Approval .....	35
4. Canadian Assessment of English Language (CAEL) .....	14	Regular Courses .....	35
Open Learning .....	14	Two-Semester Courses .....	35
Post-Degree and Letter of Permission .....	14	Address for University Communication .....	35
Second Degrees .....	14	Email Address .....	35
Honours Equivalent .....	14	Home Address .....	35
Prior Learning Assessment .....	14	Admissions .....	35
Readmission .....	14	Associated Program Requirements .....	35
Right of Selection .....	15	Attendance at Class .....	35
Specific Subject Requirements and Recommendations .....	15	Auditing Courses .....	35
University of Guelph Programs .....	15	Class Level Calculation .....	36
University of Guelph-Humber Programs .....	18	Continuation of Study .....	36
		Schedule 1 .....	36
		Schedule 2 .....	36
		Course Sections .....	37
		Department Chair's Responsibilities .....	37

Registrar's Responsibilities .....	37	Entrance Awards with Financial Need .....	54
Student's Responsibilities .....	37	In-course Scholarships .....	54
<b>Course Selection .....</b>	<b>37</b>	In-course Scholarships with Financial Need .....	59
New Students .....	37	In-course Awards with Financial Need .....	61
In-Course Students .....	37	In-course Travel Grants .....	63
<b>Dean's Honours List .....</b>	<b>38</b>	<b>Bachelor of Arts .....</b>	<b>65</b>
<b>Deferred Privileges .....</b>	<b>38</b>	Entrance Scholarships .....	65
Deferred Condition .....	38	Entrance Scholarships with Financial Need .....	67
Deferred Examination .....	38	Entrance Awards with Financial Need .....	68
Procedures .....	38	In-course Scholarships .....	68
<b>Dropping Courses .....</b>	<b>39</b>	In-course Scholarships with Financial Need .....	79
Deadline Dates .....	39	In-course Awards with Financial Need .....	81
Instructor Notification .....	39	In-course Travel Grants .....	85
Refunds .....	39	<b>Bachelor of Arts and Science .....</b>	<b>87</b>
Regular Courses .....	39	Entrance Scholarships .....	87
Two-Semester Courses .....	39	Entrance Scholarships with Financial Need .....	88
<b>Examinations .....</b>	<b>39</b>	Entrance Awards with Financial Need .....	89
Mid-Term Examinations .....	39	In-course Scholarships .....	89
Final Examinations / Assignments and Final Week of Classes .....	39	In-course Scholarships with Financial Need .....	91
Policy on Student Access to Final Examination Materials .....	41	In-course Awards with Financial Need .....	92
<b>Exchange Programs .....</b>	<b>41</b>	In-course Travel Grants .....	94
<b>Failed Courses .....</b>	<b>41</b>	<b>Bachelor of Bio-Resource Management Degree .....</b>	<b>96</b>
Multiple Failure Limitations .....	41	Entrance Scholarships .....	96
Grading System .....	41	Entrance Scholarships with Financial Need .....	98
Alternate Grading System .....	41	Entrance Awards with Financial Need .....	98
Other Grade Notations .....	41	In-course Scholarships .....	98
Grading Procedures .....	42	In-course Scholarships with Financial Need .....	101
Submission of Final Grades .....	42	In-course Awards with Financial Need .....	102
Release of Final Grades .....	43	In-course Travel Grants .....	105
<b>Grade Reassessment .....</b>	<b>43</b>	<b>Bachelor of Commerce .....</b>	<b>107</b>
Calculation Errors or Omissions .....	43	Entrance Scholarships .....	107
Methods or Criteria Used in Establishing Final Grades .....	43	Entrance Scholarships with Financial Need .....	109
Misapplication of an Academic Regulation or Procedure .....	43	Entrance Awards with Financial Need .....	110
<b>Graduate Courses .....</b>	<b>43</b>	In-course Scholarships .....	110
<b>Graduation .....</b>	<b>43</b>	In-course Scholarships with Financial Need .....	118
A. Baccalaureate Programs .....	43	In-course Awards with Financial Need .....	121
B. Certificate and Diploma Programs .....	44	In-course Travel Grants .....	125
C. Procedures .....	44	<b>Bachelor of Computing .....</b>	<b>128</b>
D. Standing on Graduation .....	44	Entrance Scholarships .....	128
E. Notation on Transcript .....	45	Entrance Scholarships with Financial Need .....	129
<b>Letters of Confirmation of Enrolment .....</b>	<b>45</b>	Entrance Awards with Financial Need .....	130
<b>Letters of Confirmation of Graduation .....</b>	<b>45</b>	In-course Scholarships .....	130
<b>Letters of Permission .....</b>	<b>45</b>	In-course Scholarships with Financial Need .....	133
<b>Priority Access Courses .....</b>	<b>45</b>	In-course Awards with Financial Need .....	134
<b>Prior Learning Assessment .....</b>	<b>45</b>	In-course Travel Grants .....	136
<b>Readmission .....</b>	<b>45</b>	<b>Bachelor of Landscape Architecture .....</b>	<b>138</b>
<b>Registration .....</b>	<b>46</b>	Entrance Scholarships .....	138
In-Course Students .....	46	Entrance Scholarships with Financial Need .....	140
Parking Payments .....	46	Entrance Awards with Financial Need .....	140
Changes to Preprinted Calculations .....	46	In-course Scholarships .....	140
Cancellation/Withdrawal Procedure .....	46	In-course Scholarships with Financial Need .....	144
Hospitality Services, OSAP, Parking .....	46	In-course Awards with Financial Need .....	145
Return Mail Box Locations (Internal Mail) .....	46	In-course Travel Grants .....	149
Late Registration .....	46	<b>Bachelor of Science .....</b>	<b>151</b>
<b>Schedule of Studies .....</b>	<b>46</b>	Entrance Scholarships .....	151
<b>Scheduling .....</b>	<b>46</b>	Entrance Scholarships with Financial Need .....	153
Undergraduate Course Timetable .....	46	Entrance Awards with Financial Need .....	154
Changes to the Published Undergraduate Course Timetable .....	47	In-course Scholarships .....	155
<b>Staff Registration and Tuition Waiver .....</b>	<b>47</b>	In-course Scholarships with Financial Need .....	166
<b>Student Type .....</b>	<b>47</b>	In-course Awards with Financial Need .....	169
Regular .....	47	In-course Travel Grants .....	173
Special .....	47	<b>Bachelor of Science in Agriculture .....</b>	<b>177</b>
<b>Supplemental Privilege Procedures .....</b>	<b>47</b>	Entrance Scholarships .....	177
Student's Responsibilities .....	47	Entrance Scholarships with Financial Need .....	179
Academic Review Sub-Committee's Responsibilities .....	47	Entrance Awards with Financial Need .....	180
Instructor's Responsibilities .....	47	In-course Scholarships .....	180
Department Chair's Responsibilities .....	48	In-course Scholarships with Financial Need .....	187
Registrar's Responsibilities .....	48	In-course Awards with Financial Need .....	188
<b>Transcripts .....</b>	<b>48</b>	In-course Travel Grants .....	193
<b>Transfer of Program .....</b>	<b>48</b>	<b>Bachelor of Science in Engineering .....</b>	<b>196</b>
<b>Verification Notice .....</b>	<b>48</b>	Entrance Scholarships .....	196
<b>Withdrawal .....</b>	<b>48</b>	Entrance Scholarships with Financial Need .....	198
<b>IX. Scholarships and Other Awards .....</b>	<b>50</b>	Entrance Awards with Financial Need .....	199
General Statements on Awards .....	50	In-course Scholarships .....	199
<b>Bachelor of Applied Science .....</b>	<b>51</b>	In-course Scholarships with Financial Need .....	202
Entrance Scholarships .....	51	In-course Awards with Financial Need .....	203
Entrance Scholarships with Financial Need .....	53	In-course Travel Grants .....	205

<b>Bachelor of Science in Environmental Sciences .....</b>	<b>207</b>	Rural and Development Sociology (RDS) .....	277
Entrance Scholarships .....	207	Rural Extension Studies (RES) .....	277
Entrance Scholarships with Financial Need .....	209	Social Psychology (SPSY) .....	277
Entrance Awards with Financial Need .....	210	Sociology (SOC) .....	277
In-course Scholarships .....	210	Spanish (SPAN) .....	278
In-course Scholarships with Financial Need .....	215	Statistics (STAT) .....	278
In-course Awards with Financial Need .....	217	Studio Art (SART) .....	279
In-course Travel Grants .....	221	Theatre Studies (THST) .....	280
<b>Bachelor of Science in Technology .....</b>	<b>223</b>	Visual Arts of the Americas (VAA) (Minor) .....	280
Entrance Scholarships .....	223	Women's Studies (WMST) .....	280
Entrance Scholarships with Financial Need .....	224	<b>Bachelor of Arts and Sciences (B.A.S) .....</b>	<b>282</b>
Entrance Awards with Financial Need .....	225	Program Information .....	282
In-course Scholarships .....	225	<b>Bachelor of Bio-Resource Management Degree (B.B.R.M.) .....</b>	<b>284</b>
In-course Scholarships with Financial Need .....	229	Program Information .....	284
In-course Awards with Financial Need .....	230	Horticulture Management Major .....	284
In-course Travel Grants .....	233	Environmental Management Major .....	285
<b>Doctor of Veterinary Medicine .....</b>	<b>234</b>	<b>Bachelor of Commerce (B.Comm.) .....</b>	<b>287</b>
Entrance Scholarships .....	234	Program Information .....	287
Entrance Awards with Financial Need .....	234	Agricultural Business (AGBU) .....	288
In-course Scholarships .....	234	Agricultural Business (Co-op) (AGBU:C) .....	288
In-course Scholarships with Financial Need .....	240	Hotel and Food Administration (HAFA) .....	289
In-course Awards with Financial Need .....	241	Hotel and Food Administration (Co-op) (HAFA:C) .....	290
In-course Travel Grants .....	246	Human Resources Management (HRM) .....	290
<b>Other Forms of Financial Assistance .....</b>	<b>248</b>	Management Economics in Industry and Finance (MEIF) .....	291
Independent Study - O.A.C. ....	248	Management Economics in Industry and Finance (Co-op) (MEIF:C) .....	292
Open Learning program Awards .....	248	Marketing Management (MKMN) .....	293
Ontario Student Assistance Program (OSAP) .....	248	Marketing Management (Co-op) (MKMN:C) .....	294
Loans - All Colleges .....	248	Public Management (PMGT) .....	295
Loans - Ontario Agricultural College .....	248	Public Management (Co-op) (PMGT:C) .....	295
<b>X. Degree Programs .....</b>	<b>249</b>	Real Estate and Housing (REH) .....	296
<b>Specializations and Their Degrees .....</b>	<b>249</b>	Real Estate and Housing (Co-op) (REH:C) .....	296
<b>Bachelor of Applied Science (B.A.Sc.) .....</b>	<b>253</b>	Tourism Management (TMGT) .....	297
Program Information .....	253	<b>Bachelor of Computing (B.Comp.) .....</b>	<b>299</b>
Applied Human Nutrition (AHN) .....	253	Program Information .....	299
Child, Youth and Family (CYF) .....	254	Schedule of Studies .....	299
Child, Youth and Family (Co-op) (CYF:C) .....	255	Schedule of Studies Co-op .....	300
Gerontology (GERN) .....	255	<b>Bachelor of Landscape Architecture (B.L.A.) .....</b>	<b>301</b>
Gerontology (Co-op) (GERN:C) .....	256	Program Information .....	301
<b>Bachelor of Arts (B.A.) .....</b>	<b>257</b>	Schedule of Studies .....	301
Program Information .....	257	<b>Bachelor of Science (B.Sc.) .....</b>	<b>303</b>
Agricultural Economics (AGEC) .....	259	The Three Semester System .....	303
Anthropology (ANTH) .....	259	Transfer from One B.Sc. Program to Another .....	303
Art History (ARTH) .....	260	Program Information .....	303
Art Theory and Criticism (ATC) .....	260	Doctor of Veterinary Medicine .....	303
Business Administration (BADM) .....	261	General Program (BSCG) .....	303
Classical Languages (CLAL) .....	261	Honours Programs (BSCH) .....	304
Classical Studies (CLAS) .....	261	Animal Biology (ABIO) .....	305
Cognitive Neuropsychology (CGNR) .....	261	Applied Mathematics and Statistics (Co-op) (APMS:C) .....	305
Computing and Information Science (CIS) .....	261	Biochemistry (BIOC) .....	306
Computing and Information Science (Co-op) (CIS:C) .....	262	Biochemistry (Co-op) (BIOC:C) .....	306
Criminal Justice and Public Policy (CJPP) .....	263	Biological Chemistry (BCHM) .....	307
Developmental Psychology (DPSY) .....	263	Biological Science (BIOS) .....	308
Economics (ECON) .....	264	Biology (BIOL) .....	308
Economics (Co-op) (ECON:C) .....	264	Bio-Medical Science (BIOM) .....	309
Educational Psychology (EPSY) .....	265	Biomedical Toxicology (BTOX) .....	309
English (ENGL) .....	265	Biomedical Toxicology (Co-op) (BTOX:C) .....	310
Environmental Studies (ENVS) .....	265	Biophysics (BIOP) .....	310
European Studies (EURS) .....	265	Biophysics (Co-op) (BIOP:C) .....	311
Family and Child Studies (FCS) .....	267	Biotechnology (BIOT) .....	311
French Studies (FREN) .....	268	Business Administration (BADM) .....	311
Geography (GEOG) .....	268	Chemical Physics (CHPY) .....	312
German (GERM) .....	268	Chemical Physics (Co-op) (CHPY:C) .....	312
History (HIST) .....	269	Chemistry (CHEM) .....	313
Individual Studies (IS) .....	269	Chemistry (Co-op) (CHEM:C) .....	313
Information Systems and Human Behaviour (ISHB) .....	269	Computing and Information Science (CIS) .....	314
International Development (ID) .....	270	Computing and Information Science (Co-op) (CIS:C) .....	315
Italian (ITAL) .....	272	Earth Surface Science (ESS) .....	316
Marketing Management (MKMN) .....	272	Ecology (ECOL) .....	316
Mathematical Economics (MAEC) .....	272	Environmental Biology (ENVB) .....	317
Mathematics (MATH) .....	273	Environmental Toxicology (ETOX) .....	318
Museum Studies (MS) .....	273	Environmental Toxicology (Co-op) (ETOX:C) .....	319
Music (MUSC) .....	273	Food Science (FOOD) .....	319
Organizational Behaviour (OBEH) .....	274	Food Science (Co-op) (FOOD:C) .....	320
Philosophy (PHIL) .....	274	Forest Science (FORS) .....	320
Political Science (POLS) .....	274	Functional Foods and Nutraceuticals (FFAN) .....	320
Psychology (PSYC) .....	275	Geographic Information Systems (GIS) and Environmental Analysis .....	321
Psychology (Co-op) (PSYC:C) .....	276	Geology (GEOL) .....	321

Human Kinetics (HK) .....	321	<b>Certificates and Diplomas .....</b>	<b>360</b>
Marine and Freshwater Biology (MFB) .....	321	Certificate in Environmental Citizenship .....	360
Mathematical Science (MSCI) .....	322	Certificate in Environmental Conservation .....	360
Mathematics (MATH) .....	322	Certificate in Food Science .....	360
Microbiology (MICR) .....	322	Certificate in Hospitality Studies .....	360
Microbiology (Co-op) (MICR:C) .....	323	Certificate in Leadership .....	360
Molecular Biology and Genetics (MBG) .....	324	Diploma in Applied Statistics .....	361
Neuroscience (NEUR) .....	325	Diploma in Public Policy and Administration .....	361
Nutritional and Nutraceutical Sciences (NANS) .....	325	<b>Co-operative Education .....</b>	<b>361</b>
Nutritional Sciences (NSCI) .....	326	<b>Distance Education .....</b>	<b>361</b>
Physical Science (PSCI) .....	326	<b>General Studies .....</b>	<b>362</b>
Physics (PHYS) .....	327	Academic Counselling .....	362
Physics (Co-op) (PHYS:C) .....	327	Financial Assistance .....	363
Plant Biology (PBIO) .....	328	Schedule of Studies .....	363
Plant Biotechnology (PBTC) .....	329	Tuition Fees .....	363
Psychology (PSYC) .....	329	Undergraduate Regulations .....	363
Statistics (STAT) .....	330	<b>Graduate Studies .....</b>	<b>363</b>
Theoretical Physics (THPY) .....	331	<b>Interdisciplinary Studies .....</b>	<b>363</b>
Wild Life Biology (WLB) .....	331	Bachelor of Arts .....	363
Zoology (ZOO) .....	332	Bachelor of Commerce .....	363
<b>Bachelor of Science in Agriculture [B.Sc.(Agr.)] .....</b>	<b>333</b>	Bachelor of Science (Biological Science) .....	363
Program Information .....	333	Bachelor of Science in Environmental Sciences .....	363
Honours Agriculture (AGRS) .....	333	<b>Open Learning .....</b>	<b>363</b>
Agricultural Economics (AGEC) .....	334	The Office of Open Learning .....	363
Agroecosystem Management (AGMN) .....	334	The Open Learning program .....	363
Agronomy (AGRO) .....	335	Continuing Education Option .....	363
Animal Science (ANSC) .....	335	Guaranteed Admission to a B.A. Program .....	363
Horticultural Science (HORT) .....	336	Open Learning program Certificates and Diplomas .....	363
Organic Agriculture(OAGR) .....	336	Open Learning program Courses* .....	363
Electives .....	337	Open Learning Scholarships/Bursaries .....	364
<b>Bachelor of Science in Engineering [B.Sc.(Eng.)] .....</b>	<b>339</b>	Distance Education .....	364
Program Information .....	339	Continuing Education .....	364
Biological Engineering Program Regular and Co-op (BIOE/BIOE:C) .....	339	<b>Summer Studies (Summer Semester) .....</b>	<b>365</b>
Engineering Systems and Computing Program Regular and Co-op (ESC/ESC:C) .....	340	<b>XII. Course Descriptions .....</b>	<b>366</b>
Environmental Engineering Program Regular and Co-op (ENVE/ENVE:C) .....	340	<b>General Information .....</b>	<b>366</b>
Water Resources Engineering Program Regular and Co-op (WRE/WRE:C) ....	341	Course Labelling and Levels .....	366
Food Engineering (FENG) .....	341	Course Information .....	366
<b>Bachelor of Science in Environmental Sciences [B.Sc.(Env.)] .....</b>	<b>343</b>	Course Prerequisites .....	366
Program Information .....	343	Course Equates and Restrictions .....	366
Earth and Atmospheric Science (EAAS) .....	343	<b>Agricultural Economics .....</b>	<b>367</b>
Earth and Atmospheric Science (EAAS:C) .....	344	<b>Agriculture .....</b>	<b>369</b>
Ecology (ECOL) .....	345	<b>Anatomy .....</b>	<b>371</b>
Ecology (ECOL:C) .....	345	<b>Animal Science .....</b>	<b>372</b>
Environmental Economics and Policy (EEP) .....	345	<b>Anthropology .....</b>	<b>374</b>
Environmental Economics and Policy (EEP:C) .....	346	<b>Art History .....</b>	<b>376</b>
Environmental Geography (ENVG) .....	346	<b>Arts and Sciences .....</b>	<b>378</b>
Environmental Geography (ENVG:C) .....	347	<b>Biochemistry .....</b>	<b>379</b>
Environmental Monitoring and Analysis (EMA) .....	347	<b>Biology .....</b>	<b>380</b>
Environmental Monitoring and Analysis (EMA:C) .....	347	<b>Biomedical Sciences .....</b>	<b>382</b>
Environmental Protection (ENVP) .....	348	<b>Botany .....</b>	<b>384</b>
Environmental Protection (ENVP:C) .....	348	<b>Chemistry .....</b>	<b>385</b>
Environmetrics (ENVM) .....	349	<b>Classical Studies .....</b>	<b>387</b>
Environmetrics (ENVM:C) .....	349	<b>Computing and Information Science .....</b>	<b>389</b>
Natural Resources Management (NRM) .....	350	<b>Co-operative Education .....</b>	<b>392</b>
Natural Resources Management (NRM:C) .....	350	<b>Crop Science .....</b>	<b>393</b>
Areas of Emphasis .....	351	<b>Economics .....</b>	<b>394</b>
<b>Bachelor of Science in Technology [B.Sc.(Tech.)] .....</b>	<b>353</b>	<b>Engineering .....</b>	<b>397</b>
Program Information .....	353	<b>English .....</b>	<b>401</b>
Applied Pharmaceutical Chemistry (APPC:C) .....	353	<b>Environmental Biology .....</b>	<b>406</b>
Physics and Technology (PHTC:C) .....	353	<b>Environmental Design and Rural Development .....</b>	<b>408</b>
<b>Doctor of Veterinary Medicine (D.V.M.) .....</b>	<b>355</b>	<b>Environmental Management .....</b>	<b>409</b>
Program Information .....	355	<b>Environmental Sciences .....</b>	<b>411</b>
Schedule of Studies .....	356	<b>European Studies .....</b>	<b>412</b>
<b>Co-operative Education Programs .....</b>	<b>357</b>	<b>External Courses .....</b>	<b>413</b>
Admission Information .....	357	<b>Family Relations and Human Development .....</b>	<b>416</b>
Eligibility .....	357	<b>Food Science .....</b>	<b>419</b>
Continuation of Study .....	357	<b>French Studies .....</b>	<b>421</b>
Release of Academic Information .....	357	<b>Geography .....</b>	<b>424</b>
Procedures for Work Semester Reports .....	357	<b>Geology .....</b>	<b>426</b>
Conditions for Graduation .....	357	<b>German Studies .....</b>	<b>428</b>
Co-op Fees .....	357	<b>Greek .....</b>	<b>429</b>
Schedule of Studies .....	357	<b>History .....</b>	<b>430</b>
<b>University of Guelph-Humber .....</b>	<b>358</b>	<b>Horticultural Science .....</b>	<b>435</b>
<b>Associate Diploma Programs .....</b>	<b>359</b>	<b>Hospitality and Tourism Management .....</b>	<b>437</b>
<b>XI. Special Study Opportunities .....</b>	<b>360</b>	<b>Human Kinetics .....</b>	<b>440</b>
		<b>Humanities .....</b>	<b>442</b>
		<b>Interdisciplinary Physical Science .....</b>	<b>443</b>

Interdisciplinary Social Science .....	444	<b>XVI. Administration and Faculty .....</b>	<b>522</b>
Interdisciplinary University .....	445	<b>Administration and Faculty .....</b>	<b>522</b>
Integrative Biology .....	446	The Board of Governors .....	522
International Development .....	447	Honorary Fellows of the University .....	522
Italian Studies .....	448	Medal of Merit .....	522
Landscape Architecture .....	449	John Bell Award .....	522
Latin .....	451	The Lincoln Alexander Medal of Distinguished Service .....	522
Linguistics .....	452	Administrative Officers .....	522
Marketing and Consumer Studies .....	453	<b>Administrative Departments .....</b>	<b>523</b>
Mathematics .....	456	Alumni Affairs and Development .....	523
Molecular and Cellular Biology .....	458	Arboretum .....	523
Meteorology .....	459	Athletics .....	523
Microbiology .....	460	Audit Services .....	523
Molecular Biology and Genetics .....	462	Centre for Families, Work and Well-Being .....	523
Music .....	464	Centre for Food Security .....	523
Nutrition .....	467	Centre for International Programs .....	523
Pathology .....	469	Centre for Studies in Leadership .....	523
Pharmacology .....	470	Communications and Public Affairs .....	523
Philosophy .....	471	Campus Community Police, Fire Prevention and Parking Services .....	523
Physics .....	474	Computing and Communications Services .....	523
Physiology .....	476	Co-operative Education and Career Services .....	523
Plant Biology .....	477	Environmental Health and Safety .....	524
Political Science .....	478	Hospitality Services .....	524
Population Medicine .....	482	Physical Resources .....	524
Psychology .....	483	Financial Services .....	524
Rural Extension .....	487	Health and Performance Centre .....	524
Sociology .....	488	Human Resources .....	524
Sociology and Anthropology .....	491	Human Rights and Equity Office .....	524
Soil Science .....	492	Learning Commons .....	524
Spanish Studies .....	494	Library .....	524
Statistics .....	496	Macdonald Stewart Art Centre .....	524
Studio Art .....	498	Office of Open Learning .....	524
Theatre Studies .....	501	Office of Registrarial Services .....	525
Toxicology .....	504	Office of Research .....	525
Veterinary Medicine .....	505	Office of Student Affairs .....	525
Women's Studies .....	509	Student Health Services .....	525
Zoology .....	510	Student Housing Services .....	525
<b>XIII. Diploma Programs .....</b>	<b>512</b>	Student Life & Counselling .....	525
<b>XIV. General Information .....</b>	<b>513</b>	Teaching Support Services .....	525
Centres and Institutes .....	513	Undergraduate Academic Information Centre .....	526
Child Care .....	513	University Centre .....	526
Copyright Policy .....	513	<b>College of Arts .....</b>	<b>526</b>
Cultural Affairs .....	513	Department of History .....	526
Guelph Campus Cooperative .....	513	Department of Philosophy .....	526
Guelph Campus Co-op Housing .....	513	School of Fine Art and Music .....	526
Co-op Bookstore .....	513	School of Languages and Literatures .....	527
Health and Performance Centre .....	513	School of English and Theatre Studies .....	527
Human Rights and Equity Office .....	514	<b>College of Biological Science .....</b>	<b>527</b>
Information on Teaching Certificates .....	514	Department of Human Health and Nutritional Sciences .....	527
International Students .....	514	Department of Integrative Biology .....	528
Inventions Policy .....	514	Department of Molecular and Cellular Biology .....	528
Library .....	514	<b>College of Physical and Engineering Science .....</b>	<b>528</b>
OPIRG-Guelph .....	514	Department of Chemistry .....	529
Regular Officer Training Plan (ROTP) .....	515	Department of Computing and Information Science .....	529
Statistics Canada - Notification of Disclosure .....	515	Department of Mathematics and Statistics .....	529
Student Computing .....	515	Department of Physics .....	529
Student Life .....	515	Faculty of Environmental Sciences .....	530
Athletics .....	515	School of Engineering .....	530
Learning Commons .....	515	<b>College of Social and Applied Human Sciences .....</b>	<b>530</b>
Office of the Associate Vice-President, Student Affairs .....	515	Department of Economics .....	530
Student Government .....	515	Department of Family Relations and Applied Nutrition .....	531
Student Health Services .....	516	Department of Geography .....	531
Student Housing Services .....	516	Department of Marketing and Consumer Studies .....	531
Student Life and Counselling Services .....	516	Department of Political Science .....	531
Co-operative Education & Career Services .....	517	Department of Psychology .....	532
<b>Student Rights and Responsibilities .....</b>	<b>517</b>	Department of Sociology and Anthropology .....	532
University Community Principles .....	517	School of Hospitality and Tourism Management .....	532
Academic Responsibilities .....	517	<b>Ontario Agricultural College .....</b>	<b>532</b>
Offenses .....	517	Department of Agricultural Economics and Business .....	532
Judicial Processes .....	518	Department of Animal and Poultry Science .....	533
<b>Students With Disabilities (CSD) .....</b>	<b>518</b>	Department of Environmental Biology .....	533
University Bookstore .....	518	Department of Food Science .....	533
University Centre .....	518	Department of Land Resource Science .....	534
University I.D. Cards .....	519	Department of Plant Agriculture .....	534
<b>XV. Summary of Attendance .....</b>	<b>520</b>	School of Environmental Design and Rural Development .....	534
		<b>Ontario Veterinary College .....</b>	<b>535</b>
		Department of Biomedical Sciences .....	535

---

Department of Clinical Studies .....	535
Department of Pathobiology .....	536
Population Medicine .....	536
<b>Glossary .....</b>	<b>538</b>
<b>Revisions .....</b>	<b>540</b>
February 1, 2006 .....	540
March 14, 2006 .....	540
August 22, 2006 .....	540
January 23, 2007 .....	540

# 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 Objectives (Section II);
- familiarizing yourself with the Undergraduate Degree Regulations & Procedures (Section VIII) and understanding grading procedures and continuation of study regulations;
- selecting a program of study to meet both degree and specialization requirements (Section X--Degree Programs) and carefully reviewing the personalized Program/Academic Evaluation Report you receive each semester, 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 Section 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 (Section III) with particular attention to deadlines;
- referring to the procedures for Academic Consideration (Section 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 (Section 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 WEBmail 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

### History

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 six colleges--College of Arts, College of Biological Science, College of Physical and Engineering Science, College of Social and Applied Human Sciences, the Ontario Agricultural College, and the Ontario Veterinary College.

The University of Guelph is renowned in Canada and around the world as a research-intensive and learner-centred institution and for its commitment to open learning, internationalism and collaboration.

Students may pursue more than 80 undergraduate and 45 graduate degree programs spanning the natural and physical sciences, social sciences and humanities. Faculty at the University of Guelph have won more prestigious 3M Fellow teaching awards than 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, including 16,617 full- and part-time undergraduates, 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 over a \$120 million in annual research funding, the University of Guelph is one of the country's top research institutions. Among its researchers, Guelph numbers 19 Fellows of the Royal Society of Canada. A 30-acre 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 and Food (OMAF) relocated OMAF employees to an 86,000-square-foot research complex adjacent to campus, and made the University responsible for Ontario's agricultural colleges at Alfred, Kemptville and Ridgetown, the Horticultural Research Institute of Ontario and OMAF's Laboratory Services. With its enhanced partnership, its research park 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 approximately 700 international students from 100 countries and maintains 61 study abroad programs (56 exchange and 5 semester abroad) with 27 countries. There are about 500 University of Guelph students studying abroad. The University of Guelph has 60 public- and private-sector partners in 30 countries, and participates in Canadian International Development Agency (CIDA) 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 78,000 alumni in 130 countries.

### 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>.

### Academic Organization

- College of Arts
  - School of Fine Art and Music
  - School of Languages and Literatures
  - School of English and Theatre Studies
- College of Biological Science
- College of Physical and Engineering Science
  - School of Engineering
- College of Social and Applied Human Sciences
  - School of Hospitality and Tourism Management
- Ontario Agricultural College
  - Collège d'Alfred
  - Kemptville College
  - Ridgetown College
  - School of Environmental Design and Rural Development
- Ontario Veterinary College
- Faculty of Environmental Sciences
- Faculty of Management

- Faculty of Graduate Studies
- Biophysics Interdepartmental Group
- Centre for Families, Work and Well-Being
- Centre for Food Security
- Centre for Genetic Improvement of Livestock
- Centre for International Programs
- Health and Performance Centre
- Centre for Land and Water Stewardship
- Centre for New Students
- Centre for Toxicology
- Colonel K.L. Campbell Centre for the Study of Animal Welfare
- George Morris Centre
- Guelph Food Technology Centre
- Guelph Turfgrass Institute
- Horticultural Research Institute of Ontario
- Independent Study/OAC Access
- Institute for Environmental Policy and Stewardship
- Institute of Ichthyology
- Landscape Research Group
- Office of Open Learning
- Office of Research
- Teaching Support Services
- Four inter-university research programs:
  - Guelph Waterloo Centre for Research in Biotechnology
  - Guelph Waterloo Centre for Graduate Work in Physics
  - Guelph Waterloo Centre for Research in Chemistry
  - Guelph McMaster Graduate Program in Philosophy

### Learning Objectives

Arising from the Aims and Objectives Report, the following Objectives were approved by the Senate of the University in 1987:

1. Literacy
2. Numeracy
3. Sense of Historical Development
4. Global Understanding
5. Moral Maturity
6. Aesthetic Maturity
7. Understanding of Forms of Inquiry
8. Depth and Breadth of Understanding
9. Independence of Thought
10. Love of Learning

They are a set of objectives described in terms of the desired characteristics of educated graduates, and are used in part to guide educators in their development of courses and programs. Their descriptions are as follows:

#### 1. Literacy

Literacy is the base on which all else is predicated. The ability to read and write and, in general, to communicate properly is a fundamental intellectual tool. With it, students can learn to think clearly and to some purpose. Without it, they cannot analyze properly nor develop an independence of thought. Literacy affords a means of access to the raw material upon which the critical or creative intelligence is to be exercised. It affords a means of communication, of shaping ideas and concepts, of selecting between different or competing formulations. It is a means of instructing others.

The most basic experience in literacy given to the student should be the writing of a short expository paper, or the oral presentation of an informational report, on a prescribed topic or on a topic chosen from a restricted list.

At the next level, the student should be required to write a paper (or give a seminar), critical and analytical in its intent, on a topic of the student's devising. The ability to devise a topic, to frame its bounds, is at the same time an aspect of understanding of first order importance.

At the highest level, there should be produced a paper, in an appropriate style, that analyzes, synthesizes or argues from a hypothesis and itself generates hypotheses; that produces knowledge, insight, or understanding in the reader and manifests it on the part of the writer; that shows a breadth of understanding in drawing out implications and making connections between remote features of the domain; that, in short, demonstrates a love of learning and an intelligent creativity. This requirement may readily be met in existing senior honours paper courses and the like.

Over the course of an undergraduate education, the level of difficulty of the material which the student can read, comprehend, and utilize should increase. One way of securing this

might be to encourage, in each discipline program where they do not now exist, reading courses requiring independent work at the 4000 level.

In general, the ability to read and comprehend materials of the highest difficulty is enhanced in semester-long research paper courses and in reading courses. Such courses contribute also to independence of thought and to depth and breadth of understanding.

In its broadest sense, the objective of literacy implies that it is desirable that the student have skill in another language, so as to be able to comprehend material of the appropriate level of sophistication in that language.

## 2. Numeracy

For the purposes of this discussion, numeracy may be defined as the ability to use mathematics at a level and in a manner appropriate to good citizenship and to vocational fitness. Mathematics deals with quantity and form, with measurement, structures, and relations, and encompasses a richer intellectual domain than just the utilitarian skills of numerical computation. It is as a mode of thinking, no less than as a collection of useful techniques, that it justifies its place in any well-rounded curriculum.

Numeracy, in the sense adopted here, is an essential attribute of the informed and responsible citizen. A correct understanding of the proper use of numbers is necessary in a culture in which information routinely comes in numeric form and significant decisions of social policy often have quantification at their base. Without the ability to comprehend the use of quantitative data, and to detect instances of misuse, we may have to forego opportunities for independent judgment.

Numeracy, more generally, enforces an accuracy and precision of procedure and thought that is valuable to all educated persons. As a mode of conceptualization of thought, it should be part of the mental apparatus of all graduating students. While a grasp of the nature and principles of mathematical forms of inquiry is essential to an understanding of scientific thought, it can be of benefit in other areas of intellectual activity. Opportunities for fostering numeracy exist in more disciplines than those traditionally requiring a substantial knowledge of mathematics. A recognition that numeracy, in association with literacy, forms the foundation of most if not all of the other learning objectives, should result in greater exploitation of those opportunities than in their avoidance.

## 3. Sense of Historical Development

All disciplines have a history, an understanding of which contributes to an understanding of the place each has in contemporary society. No discipline is self-sufficient, and no discipline is autonomous. "Historical development" should not be narrowly construed to mean only the history of the discipline within its own limits, but efforts should be made to connect developments in the discipline to wider coeval social conditions. Students may thereby be endowed with a sense of the fundamental relativity of knowledge and understanding at any given time.

This objective comports also a sense of the continuity of change (and, indeed, of discontinuities), over time.

This objective may facilitate the acceptance, on the part of students, of intellectual ambiguity or uncertainty; such acceptance is a mark of depth of understanding.

## 4. Global Understanding

Global understanding may be associated with "Sense of Historical Development". It can be described as comprehension of the variety of political, religious, cultural, geographical, biological, environmental, and historical forces in the shaping of nature and the human condition. It conveys to the student an understanding of the ways in which specific cultural or geographical or other circumstances condition the differences between nations or peoples, and an understanding of the place of his or her discipline in the international setting. Global understanding may be enhanced by a sense of historical perspective, by breadth of understanding, and by independence of thought. In its turn it may itself contribute to these.

## 5. Moral Maturity

Moral maturity is marked by depth and consistency of moral judgment; by recognition that any moral judgment may be fallible; that moral judgment is complex, in that moral principles, if they are to be applied to a specific case, may need to be interpreted. Moral maturity is a requirement in the person who is to apply a body of knowledge or a skill to the solution of a problem, or to the understanding of a situation, if the knowledge is not to remain abstract and the skill potential unrealized.

Attainment of this objective is probably best realized by appropriate consideration of moral issues in context, as they arise in the course of study. In this way, a moral perspective may be shown to be inherently important to study of a body of material, and not merely something supplementary to it (guidelines for conducting ethical discussion in the classroom have been written by the Ethics Research Group in the Department of Philosophy).

Scope for demonstration of moral maturity can be provided in seminars and other assignments, if problems in the moral issues associated with a subject are set for consideration alongside problems in content and process.

## 6. Aesthetic Maturity

Aesthetic maturity may be described as a quality of the critical response to some object, natural or artificial, external to the self. Or it may be a process of creation and development of the self. In the former case, aesthetic maturity may be attained by a sufficient exposure,

not necessarily in courses alone, to works of art (inclusive of music, literature, and drama) and to the critical traditions concerning them. Such maturity may also be directed at aesthetic valuing of features of the natural environment.

In the latter case, attainment of the quality will require an active involvement in the work of creation itself. A different order of aesthetic maturity may be attained by practice of that form of manipulation and recreation of the original object known as criticism (as distinct from appreciation).

Viewed this way, aesthetic maturity has a certain resemblance to both independence of thought and depth of understanding, in requiring an active creativity.

Aesthetic maturity need not be divorced from the specific character of individual disciplines. By possession and exercise of aesthetic maturity, students may be brought to appreciate the order, elegance, and harmony not only of the subject matter, but also of the procedures, of the discipline.

## 7. Understanding of Forms of Inquiry

Inquiry, the search for truth, information, knowledge and understanding, follows a methodology based upon systematic study, reflection, intuition and innate creativity. Inquiry involves resolving an identified problem, collecting relevant information, evaluating the information and observing relationships in order to reach a conclusion. The student is the active inquirer and must be able to undertake the process independently. Scientific method represents a form of inquiry concerned with hypotheses development, data collection, analyses and interpretation. Just as an understanding of scientific inquiry is necessary for the educated citizen functioning in the midst of the technologies of the contemporary world, so too an appreciation of other modes of inquiry is an essential characteristic of an educated citizen. Graduates should be familiar with the modes of inquiry utilized, for example, by historians, by philosophers and by scholars concerned with the various fields of creative expression.

As outcomes of this objective, students will understand the strengths and limitations of the various forms of inquiry, and the cultural, intellectual and historic impact of these forms. The student will be able to describe similarities and differences between the inquiry methods of the physical scientist, the biological scientist, the social scientist and the scholar of the humanities.

## 8. Depth and Breadth of Understanding

Breadth of understanding is an expression of the ability to operate across disciplinary boundaries in a coherent and productive way, with principles drawn from different disciplines. Depth of understanding depends upon mastery of a body of knowledge, but it is not to be confused with knowledge, and is not necessarily commensurate with the number of courses taken in a subject.

Depth and breadth of understanding depend upon, and themselves contribute to, independence of thought; they contribute also to a love of learning. Possession of a historical perspective may be essential to a broad and deep understanding of a subject.

At the lowest level of experience, in courses introductory to a subject, students might be shown how sets of facts may be related to others both laterally and vertically (or hierarchically). The outcome of this might be simply consciousness, on the part of the student, of the possibilities of understanding, as distinct from simply knowing.

The next higher level moves from demonstration to the student of interrelationships to the development of the student's own ability to create interrelations. The experience provided will develop a creative imaginativeness skillfully exercised on a body of material mastered in some detail. But the experience, like that provided for independence of thought, goes beyond display of erudition, and requires alert curiosity and a refusal to be content with mere assemblage of data. At this level, the student should be expected to integrate knowledge and modes of interpretation and comprehension from different disciplines so as to generate a new understanding. The highest level takes the student to the ability to deal in abstractions, to generate abstractions.

In general, depth and breadth of understanding are characterized by the ability to recognize the implications of the information at hand and to put it into a broader context; and by the ability to draw upon different disciplines to provide a clearer and deeper understanding of the discipline with which the student is immediately concerned.

These outcomes might be assessed in a piece of written work such as an independent research paper, in the design of an experiment, in the identification and solution of a problem, or in a work of aesthetic creation.

## 9. Independence of Thought

At the lowest level, students are shown the possibilities of independent thinking, by an instructor who, in the classroom and elsewhere, challenges orthodoxies and criticizes received opinions. The experience provided is that of imitation or emulation of a role model. At this level, the outcome might be no more than a receptivity, on the part of the student, to critical thinking and an openness to reasoned skepticism about the authority of the expert.

At a higher level, students become actively engaged in learning and thinking. At this level, they should be given the opportunity, in seminars, tutorials, or structured small group discussions, to offer their own challenges. The bases for such challenges may be unformed, and so the challenges themselves will be open to challenge. As students become more independent in thought, they are better able to combine ideas and to generate new ideas.

At the highest level, independence of thought is a manifestation of love of learning, and it may contribute to a sense of self worth and of well-being. At this level, opportunities are provided for self-directed learning. One accomplishment may be the ability to ask the right kinds of questions, rather than the ability always to have answers.

## **10. Love of Learning**

Love of learning is perhaps the quality that activates all other qualities that are the focus of learning objectives. Its expression is not easily separable from demonstration of other virtues. Thus, the true lover of learning will demonstrate both independence of thought and depth of understanding. As a consequence, setting an objective for love of learning comports also setting an objective for other qualities as well. But love of learning is not exhausted by, for example, independence of thought.

Love of learning may be reflected in, or expressed in terms of, intellectual curiosity; the ability (as in independence of thought) to ask useful kinds of questions (rather than the ability always to have answers); the ability to see far reaching implications; the ability to make connections between disparate topics; energy and passion in the pursuit of knowledge and understanding; dissatisfaction with simply accumulating facts or data; and critical ability.

Testing and instruction must minimize rote learning, and, so far as possible, give scope for the exercise of individual patterns of learning and individual interests.

Love of learning may be impeded by the demands of frequent evaluation of students' performance. The time frames imposed at an institutional level, to provide an organizational framework for the university experience, may also impair love of learning.

Love of learning may best be enhanced by the provision of opportunities for the student's personal involvement in learning. Such opportunities are perhaps best furnished in independent research projects initiated by the student. In such autonomous, but supervised, study the student can not only engage with the conflicting views of published authorities but also see in action, close at hand, the supervisor's own love of learning.

In courses of formal instruction, the use of team teaching might help to encourage a student's own love of learning, especially if members of the teaching team take an appropriate role as "students", and if true dialogue is developed between the teachers.

## **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**

The University of Guelph was incorporated by an Act of the Ontario Legislature in 1964. The Act specifies that control of the University lies with the Board of Governors and the Senate.

The Board of Governors is responsible for the government, conduct, management and control of the University and its properties, revenues and expenditures, and business affairs. For information on the Board of Governors, their roles and responsibilities, and the terms of reference, visit the website at <http://www.uoguelph.ca/governors/>.

The Senate has 173 members. 61 are ex-officio, including the Chancellor, the President, the Provost and Vice-President (Academic), the Vice-President (Research), the Associate Vice-President (Academic), the Associate Vice-President (Student Affairs), the Associate Vice-President (Research), Associate Vice-President (Research, Agri-Food & Partnerships), the Registrar, Deans and Associate Deans, Directors of Schools, Directors of Faculties, Chairs of Departments, the Chief Librarian, the Director of Open Learning, the Director of the Centre for International Programs, the Academic Commissioner of the Central Student Association, the President of the Graduate Students' Association and the Secretary

of Senate; 62 are faculty members elected on a college basis; 28 are undergraduate students elected by programs on the basis of 1 for each 500 students enrolled; 7 are graduate students elected from and by the graduate students of each college and the School of Rural Planning and Development on the basis of 1 for each 500 students enrolled; 8 are alumni elected by the Alumni Association, 3 are non-university members chosen by and from the Board of Governors, 1 is a representative of the University of Guelph Faculty Association, 2 are representatives of staff and 1 is a representative of the Librarians.

The Senate has responsibility for educational policy, including the creation of faculties, departments, schools and institutes; courses of study and standards of admission and continuation of study; qualifications for and granting of degrees, including honorary degrees, and of diplomas; examinations and examiners, fellowships, scholarships and bursaries; and for the election of the Chancellor. For information on the University of Guelph Senate, its composition, membership, and bylaws, visit the website at <http://www.uoguelph.ca/senate/>.

## III. Schedule of Dates

The dates for the 2006-2007 academic year are listed by semester below as follows:

Summer Semester 2006

Fall Semester 2006

Winter Semester 2007

### Summer Semester 2006 (12 Week Format)

**Friday, April 21**

- Last day of course selection for Summer 2006--NEW STUDENTS

**Tuesday, April 25**

- Last day to submit Requests for Academic Consideration - 3rd meeting

**Monday, May 1**

- Last day for applications for internal program transfer to Fall Semester 2006 for all programs except B.L.A., and D.V.M.

**Wednesday, May 10**

- Add period begins

**Thursday, May 11**

- Class schedule commences

**Friday, May 12**

- Last day to submit Requests for Academic Consideration--1st meeting
- Last day to submit co-op work performance evaluations for Winter Semester 2006

**Thursday, May 18**

- Ridgetown College Convocation

**Friday, May 19**

- Add period ends
- Last day to drop two-semester courses (W/S)
- Last day for clearance to graduate for Summer Convocation

**Monday, May 22**

- Holiday--NO FULL-SEMESTER COURSES SCHEDULED--classes rescheduled to Thursday, August 3

**Thursday, May 25**

- Last day to submit co-op work semester reports for Winter Semester 2006

**Friday, May 26**

- Kemptville College Convocation

**Saturday, May 27**

- Alfred College Convocation

**Monday, June 5**

- Course selection period for Fall Semester 2006 begins--In-course students

**Thursday, June 8**

- Last day to submit Requests for Academic Consideration--2nd meeting

**Friday, June 9**

- Course selection period for Fall Semester 2006 ends--In-course students

**Monday, June 12**

- Summer Convocation

**Tuesday, June 13**

- Summer Convocation

**Wednesday, June 14**

- Summer Convocation

**Thursday, June 15**

- Summer Convocation
- Deferred examinations commence

**Friday, June 16**

- Summer Convocation
- Last day for applications to graduate for Fall Convocation

**Saturday, June 17**

- Deferred examinations scheduled

**Tuesday, June 20**

- Deferred examinations conclude

**Friday, June 30**

- Holiday--NO COURSES SCHEDULED--classes rescheduled to Friday, August 4

**Friday, July 7**

- Fortieth class day--Last day to drop one semester courses

**Friday, July 21**

- Last day of course selection for Fall 2006--NEW STUDENTS

**Thursday, August 3**

- Classes rescheduled from Monday, May 22, Monday schedule in effect

**Friday, August 4**

- Classes rescheduled from Friday, June 30, Friday schedule in effect
- Classes conclude

**Monday, August 7**

- Holiday

**Tuesday, August 8**

- Examinations commence

**Saturday, August 12**

- Examinations scheduled

**Wednesday, August 16**

- Examinations conclude

**Thursday, August 17**

- Last day to submit Requests for Academic Consideration--3rd meeting

**Monday, August 21**

- Early add period for Fall Semester 2006 begins

### Summer Session 2006 (6 Week Format)

**Thursday, May 11**

- Class schedule commences

**Monday, May 15**

- Last day to add Summer Session courses

**Monday, May 22**

- Holiday--CLASSES ARE SCHEDULED--Summer Session courses only

**Friday, June 2**

- Last day for dropping courses in Summer Session

**Wednesday, June 21**

- Classes conclude

**Monday, June 26**

- Examinations commence

**Friday, June 30**

- Examinations conclude

### Fall Semester 2006

**Friday, July 21**

- Last day of course selection for Fall 2006--NEW STUDENTS

**Monday, September 4**

- Holiday

**Friday, September 8**

- Last day to submit Requests for Academic Consideration--1st meeting

**Monday, September 11**

- Class schedule commences

**Tuesday, September 12**

- Last day to submit co-op work performance evaluations for Summer 2006

**Friday, September 15**

- Add period ends
- Last day to drop two-semester courses (S/F)

**Friday, September 22**

- Last day to submit co-op work semester reports for Summer 2006
- Last day for clearance to graduate for Fall Convocation (in absentia only--No Ceremony)

**Friday, October 6**

- Last day to submit Requests for Academic Consideration--2nd meeting

**Monday, October 9**

- Holiday--NO CLASSES SCHEDULED

**Tuesday, October 10**

- Deferred examinations commence
- Course selection period for Winter Semester 2007 begins--In-course students

**Friday, October 13**

- Last day for applications to graduate for Winter Convocation

**Saturday, October 14**

- Deferred examinations conclude

**Monday, October 16**

- Fall Convocation--No Ceremony

**Wednesday, November 1**

- Last day for applications for admission to Winter Semester 2007 for all programs with winter entry
- Course selection period ends--In-course students

**Monday, November 6**

- Fortieth class day--Last day to drop one semester courses

**Monday, November 13**

- Last day to apply for international exchange programs departing in Summer 2007 without late application fee

**Friday, November 17**

- Last day of course selection for Winter Semester 2007--NEW STUDENTS

**Friday, December 1**

- Classes conclude
- Last day for applications from in-course students for transfer (Winter Semester 2007) into Co-op program for B.A. (Psychology), B.A. (Computing & Information Science), B.Sc., and B.Comp.

**Monday, December 4**

- Examinations commence

**Monday, December 11**

- Early add period for Winter Semester 2007 begins

**Friday, December 15**

- Examinations conclude

**Monday, December 18**

- Last day to submit Requests for Academic Consideration--3rd meeting

## D.V.M. Fall Semester 2006

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**Monday, September 4**

- Holiday

**Tuesday, September 5**

- Classes Commence (Phase 1, Phase 2, Phase 3)
- Rotations commence (Phase 4)

**Monday, October 9**

- Holiday--NO CLASSES SCHEDULED
- Rotations continue (Phase 4)

**Friday, December 15**

- Classes conclude (Phase 1, Phase 2, Phase 3)

**Monday, December 18**

- Rotations conclude (Phase 4 )

## Winter Semester 2007

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**Friday, January 5**

- Last day to submit Requests for Academic Consideration--1st meeting

**Monday, January 8**

- Class schedule commences

**Tuesday, January 9**

- Last day to submit co-op work performance evaluations for Fall 2006

**Friday, January 12**

- Add period ends
- Last day to drop two-semester courses (F/W)

**Friday, January 19**

- Last day for clearance to graduate for Winter Convocation
- Last day to submit co-op work semester reports for Fall Semester 2006

**Friday, January 26**

- Last day to apply for international exchange programs departing in Fall 2007 or Winter 2008 without late application fee

**Thursday, February 1**

- Last day for applications for admission to D.V.M.

**Friday, February 2**

- Last day to submit Request for Academic Consideration--2nd meeting

**Thursday, February 8**

- Deferred examinations commence

**Friday, February 9**

- Last day for applications to graduate for Summer Convocation

**Saturday, February 10**

- Deferred examinations scheduled

**Tuesday, February 13**

- Deferred examinations conclude

**Monday, February 19**

- Winter Break begins--NO CLASSES SCHEDULED THIS WEEK
- Winter Convocation

**Tuesday, February 20**

- Winter Convocation

**Wednesday, February 21**

- Winter Convocation

**Thursday, February 22**

- Winter Convocation

**Friday, February 23**

- Winter Break ends

**Monday, February 26**

- Classes resume

**Thursday, March 1**

- Last day for applications for admission to Fall 2007 for B.L.A.

**Friday, March 2**

- Course selection period for Summer 2007 and Fall 2007 begins--In-course students

**Friday, March 9**

- Fortieth class day--Last day to drop one semester courses

**Thursday, March 15**

- Last day for applications for admission to Summer 2007 for all programs with summer entry

**Friday, March 23**

- Course selection period ends--In-course students

**Friday, March 30**

- Last day for applications from in-course students to transfer (Fall 2007 term) into the Co-op program for B.A. (Economics), B.A.Sc., B.Comm., B.Sc.(Eng.) and B.Sc.(Env.)

**Thursday, April 5**

- Classes conclude

**Friday, April 6**

- Holiday

**Monday, April 9**

- Examinations begin

**Friday, April 20**

- Last day of course selection for Summer 2007--NEW STUDENTS
- Examinations conclude

**Monday, April 23**

- Last day to submit Requests for Academic Consideration--3rd meeting

## D.V.M. Winter Semester 2007

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**Tuesday, January 2**

- Classes commence (Phase 1, Phase 2, Phase 3)
- Rotations commence (Phase 4)

**Thursday, February 1**

- Last day for applications for admission to D.V.M.

**Monday, February 19**

- Winter Break begins--NO CLASSES SCHEDULED THIS WEEK (Phase 1, Phase 2, Phase 3)

**Friday, February 23**

- Winter Break ends

**Monday, February 26**

- Classes resume (Phase 1, Phase 2, Phase 3)

**Friday, March 30**

- Classes conclude (Phase 1, Phase 2)

**Monday, April 2**

- Laboratory evaluations commence (Phase 1, Phase 2)

**Thursday, April 5**

- Classes conclude (Phase 3)

**Friday, April 6**

- Holiday

**Monday, April 9**

- Examinations commence (Phase 1, Phase 2, Phase 3)

**Friday, April 13**

- Rotations conclude (Phase 4)

**Monday, April 16**

- Summative examinations commence (Phase 4)

**Friday, April 20**

- Examinations and evaluations conclude (Phase 1, Phase 2, Phase 3, Phase 4)

**Monday, May 7**

- Externship course begins (Phase 4)

## IV. Admission Information

### Admission Requirements to University Programs in 2006

#### 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 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 6 Grade 4U or 4M and/or OAC credits, including OAC English I or ENG 4U. All specific subject requirements must be Grade 12U or OAC credits. Specific subject requirements for admission to the various degree programs are outlined in this section. Students are also advised to consult Section 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 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 February. All offers of admission which are based on interim grades will be conditional upon completion of the OSSD with 6 Grade 4U or 4M and/or OAC credits (or equivalent) and including specific subject requirements. The minimum final admission average which the applicant will have to achieve will be stipulated in the condition. 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.

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 early June may be eligible for admission consideration to all non-limited 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 outlined for guaranteed admission.

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:

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

It is suggested that students follow method a) above in order to facilitate the processing of their application. Any offers based on faxed 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. Bonus points may be taken into consideration. Applicants are advised that most 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 seven point 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. Unspecified transfer credits, 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. Students may request specific credit on an individual basis. Unspecified transfer credits, 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 Certificate.

The English Proficiency Requirement will be waived for applicants who have completed the Diploma where the language of instruction is English. Credit will be assigned upon receipt of official final results.

##### Advanced Placement

Applicants who have completed Advanced Placement courses with a minimum grade of 4 may be eligible to receive university credit to a maximum of 2.00 credits. The granting of credits and exemptions is at the discretion of the appropriate faculty, and will be based on official final results.

##### 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 April 1. The condition of the offer will be applied as outlined for Ontario applicants.

- 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 <http://www.uoguelph.ca/admissions/outofprov>.
- United States of America - Students must have a minimum grade point average of 3.0 from an accredited high school. In addition, they must present a minimum combined SAT score of 1100 based upon the critical reading and math sections or ACT score of 24. Where class rankings are reported on the transcript, a ranking in the top quarter is preferred. 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.
- General Certificate of Education (GCE) Systems - Applicants must present either the GCSE (or IGCSE) and the GCE showing one of:
  - five subjects, at least two of which must be at the GCE Advanced level
  - four subjects, at least three of which must be at the GCE Advanced level
  - Applicants who have completed GCE Advanced level examinations with a minimum grade of 'C' may be eligible to receive a maximum of 3.00 unspecified credits (1.00 credit per course). Students may request specific credit on an individual basis.
- 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 if space permits and if, prior to the beginning of the Fall semester, they

- will have attained at least the full age of twenty-one years;
- will have been out of secondary school for at least two years.
- will have normally not attended another post-secondary institution.

In addition, applicants must meet specific subject requirements or equivalents 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. Programs

Students who meet the requirements to be considered for admission as mature applicants must have acceptable standing as follows:

ENG4U and 2 additional 4U or 4M credits, one of which must contain a writing component.

Note: Mature Students who do not possess the minimum requirements for direct admission to the degree program must successfully complete a minimum of 2.00 credits in the General Studies program before applying to transfer to the B.A. program.

###### B.Comm. Program

Applicants who satisfy conditions a) and b) outlined in the "Statement of the Regulation" and wish to be considered for admission under the Mature Student Regulation must have obtained standing as follows:

(HRM, HREM, TMGT, HAF, PMGT): ENG4U a 4U Mathematics, and one additional 4U/4M credit.

(AG BUS, MKMN, MEIF): ENG4U, MCB 4U, and one additional 4U/4M credit.

Applicants will be required to submit a letter, for consideration by the Admissions Committee, in which they outline their academic goals.

**B.A.Comp., B.A.S., B.Comp., B.Sc., B.Sc. (Agr.), B.Sc. (Eng.), B.Sc. (Env.), B.Sc. (Tech.), B.A.Sc. and B.L.A.**

Applicants for any of these programs who satisfy conditions a) and b) outlined in the "Statement of the Regulation" and wish to be considered for admission under the Mature Student Regulation must have obtained standing in the specific 4U or OAC subjects or equivalent which are required of regular applicants for these programs.

**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 Admissions 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 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. All applicants must be Canadian citizens or Permanent Residents. Applicants will normally:

- a. not have previously registered at a university
- b. have completed O.S.S.D. or equivalent and
- c. have been out of secondary school for 5 years.

Applicants must submit a background information sheet which will provide their intended study objectives, including courses and program. The University, via the General Studies Admissions 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 General Studies Admissions Committee. 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 6 Grade 4U or 4M or OAC credits, 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 university 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 or OAC credits 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 must 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 up to 1.00 credit (1 full-year course) 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 Section VIII--Undergraduate Degree Regulations and Procedures.

Specific graduation requirements will be determined in consultation with the program counsellor and departmental advisor.

Applicants will 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. Undergraduate 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 Section 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**

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

- i. Transfer credits are determined by the Admissions Committee of the program to which the student is admitted, and in accordance with any existing articulation agreement with the institution in question. Please refer to the information at the beginning of Section IV on Articulation Agreements.
- ii. Transfer credits will be based on courses completed 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 required in diploma programs for consideration of any transfer credit.

- iii. Up to 7.50 credits may be granted to students from a completed three-year diploma program, and up to 3.00 credits may be granted to students from a completed two-year diploma program. The granting of additional transfer credits would 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 will be re-assessed where deemed appropriate by the Admissions 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 3.00 transfer credits upon admission to a degree program. Graduates admitted to the Bachelor of Science in Agriculture program and Bachelor of Commerce, Agricultural Business program may be eligible for additional transfer credit. A minimum overall average of B is required in the Associate Diploma Program(s) for consideration of any transfer credit.

## 4. Ontario College of Art and Design

In recognition of the equivalence of many of the courses in the program of the Ontario College of Art and Design, the University wishes to encourage qualified students of OCAD to complement their education there by studying at the University of Guelph and completing the requirements for a B.A. degree. Options available in Fine Art are listed in the B.A. schedule of studies.

If admitted to the University, students transferring from OCAD may be granted advanced standing for course work completed at OCAD according to the following schedule:

- a. Completion of first year: up to 2.50 credits in Fine Art--1.50 in Fine Art (Studio) and 1.00 in Art History
- b. Completion of second year: up to 5.00 credits in Fine Art--4.00 in Fine Art (Studio) and 1.00 in Art History
- c. Completion of third year: up to 7.50 credits in Fine Art--6.50 in Fine Art (Studio) and 1.00 in Art History
- d. Completion of four-year Diploma: up to 10.00 credits in Fine Art--9.00 in Fine Art (Studio) and 1.00 in Art History.

Students are warned that even if they are given advance standing in 10.00 credits, it is extremely unlikely that they will be able to complete the B.A. program requirements within two semesters. Please note that OCAD graduates may take a maximum of 2.00 credits in Fine Art (Studio) at Guelph.

If an offer of admission is granted, advanced standing will be determined based on assessment of the OCAD transcript by the School of Fine Art and Music. Credit will be granted only for studies completed while registered at OCAD. Please note that this transfer credit arrangement applies only to the B.A. program.

Any applicant who has completed academic studies at a post-secondary institution other than OCAD must supply a transcript to Admission Services. All previous post-secondary work will be considered in determining eligibility for admission and granting transfer credit. Students currently enrolled at OCAD who are interested in working towards a B.A. concurrently may apply for admission and pursue their studies in the Summer Semester. Please contact Admission Services, Office of Registrarial Services, Level 3, University Centre, University of Guelph, Guelph, Ontario, N1G 2W1 for additional information.

## 5. CEGEPS - Province of Quebec

- a. Applicants who present the Diplôme des Etudes Collegiales 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

Students applying from another post-secondary institution as advanced standing applicants may apply to the Fall entry point only. 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 Office of Open Learning for further information and to obtain the appropriate application form.**

## Application Procedures

Current Diploma application procedures are outlined in the Diploma Program Calendar. Doctor of Veterinary Medicine procedures are outlined in the previous section "Admission Requirements". All procedures are applicable to both full and part-time applicants. 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 Grade 12U and 12M or OAC requirements for the various programs. The OUAC 101 application may 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. 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.

## 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 through the on-line Review and Change process. If any 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, surname, mailing and home addresses are of significant importance and should be reported via the Review and Change 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.

## 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, those who previously obtained the Secondary School Honour Graduation Diploma or 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. Only in the event that a student is ineligible for admission to the highest choice program will consideration be given to the lower choices. Students who apply directly to a Co-op program and who are not admitted will be considered for the regular degree program.

Many students may wish to present additional information for consideration by the Committee on Admissions. This may be information pertaining to their academic background, employment data, reasons for requesting admission or proposed program of study. This information should be submitted directly to Admission Services, Office of Registrarial Services, Level 3, University Centre, University of Guelph, Guelph, Ontario, N1G 2W1. If there is no additional information submitted, the decision of the Admissions Committee will be based strictly on academic performance as indicated on all official transcripts submitted.

## 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
- e. Ontario College of Art and Design

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://compass.ouac.on.ca>.

## Applying From Outside Canada

Students applying from outside Canada are strongly advised to begin the application procedure six to eight months prior to the proposed entry point. Those applying for admission to the Fall semester should have their application, along with all required documentation, in Admission Services no later than March 1 in order to ensure a timely decision. There are two application options:

1. International applicants (including U.S. citizens) who do not intend to apply to another university within Ontario should complete the University of Guelph application form. This form is only available from Admission Services at <http://www.uoguelph.ca/admissions/prospective/international/index.shtml>.

2. Applicants who wish to apply to more than one university within Ontario should apply via the Ontario Universities' Application Centre, 105 application form <http://compass.ouac.on.ca>. All documents should be sent directly to Admission Services.

Applicants who wish to check on the status of their application or to verify that all required documentation has been received may contact us by emailing [intapps@registrar.uoguelph.ca](mailto:intapps@registrar.uoguelph.ca). Applicants should not direct questions about the possibility of admission to this address. 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 From Another Campus of the University of Guelph**

Applicants from Alfred, Kemptville, and Ridgetown Colleges should contact their college Registrar for the appropriate application form. Applicants wishing to transfer from the University of Guelph-Humber to the University of Guelph should follow the process outlined at <http://www.uoguelph.ca/admissions/admission/index.cfm?fuseaction=appform3>.

### **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 which is available from the University of Guelph web site at <http://www.uoguelph.ca/admissions/admission/index.cfm?fuseaction=appform3>.

## **Articulation Agreements**

### **Alfred College**

#### **Bachelor of Commerce - Hotel and Food Administration**

Graduates with a minimum grade point average of 3.0 (B+) from the two-year Food, Nutrition and Risk Management Diploma program may apply to transfer to the Hotel and Food Administration major of the Bachelor of Commerce program. Applicants must have completed an OAC credit or equivalent in Mathematics and English. Upon admission, up to 6.00 advanced standing credits may be transferred. Interested students should contact the program counsellor for the Bachelor of Commerce program.

### **Algonquin College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The articulation agreement between the University of Guelph and Algonquin College provides an opportunity for graduates from the two-year Hotel and Restaurant Management Diploma program with a minimum grade point average of 3.0 (B+) to be considered for admission to the Hotel and Food Administration major of the Bachelor of Commerce program with 6.00 advanced standing credits. Applicants will be required to have completed an OAC credit or equivalent in Mathematics and English. Interested students should contact the Bachelor of Commerce program counsellor.

### **Associate Diploma programs - University of Guelph**

#### **Bachelor of Commerce - Agricultural Business**

Graduates of the Diploma in Agriculture program and the Diploma in Horticulture program may transfer to the Bachelor of Commerce program provided they have achieved a cumulative average of 70% or higher in the Diploma program. In addition, Diploma students must have completed the OAC admission requirements, or equivalent, for admission to the Bachelor of Commerce program. To receive specific advanced standing degree credits, a minimum B (70%) standing is required in each diploma course. Students are eligible to receive a maximum of 4.00 credits. Diploma students may also obtain credit for any passed degree courses which they completed as Diploma students. Applicants should contact the program counsellor for the Bachelor of Commerce program for information regarding transfer credit.

#### **Bachelor of Science in Agriculture**

Graduates of the Diploma in Agriculture program and the Diploma in Horticulture program may transfer to the Bachelor of Science in Agriculture program provided they have achieved a cumulative 70% or higher in the Diploma program. To receive degree credit, a student must have a minimum "B" standing (70%) in the diploma course(s) specified. Upon admission to the degree program, credit will also be considered for any degree courses successfully completed while in the Diploma program.

### **Holland College - P.E.I.**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph and Atlantic Tourism and Hospitality Institute have signed an articulation agreement which will allow students graduating from the 2 year Hotel and Restaurant Management program with a minimum 3.0 (B+) cumulative grade point average and who have completed an OAC or equivalent course in Mathematics and English to be admitted to the Hotel and Food Administration major of the Bachelor of Commerce program with 10.00 transfer credits. Interested students should contact the Bachelor of Commerce program counsellor for further information.

### **Canadore College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The articulation agreement between the University of Guelph and Canadore College provides an opportunity for graduates from the three-year Hotel, Resort and Restaurant Administration program with a minimum grade point average of 3.0 (B+) to be considered for admission to the Hotel and Food Administration major of the Bachelor of Commerce program with 11.00 advanced standing credits. Applicants will be required to have completed an OAC credit or equivalent in Mathematics and English. Interested students should contact the Bachelor of Commerce program counsellor.

### **Centennial College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph will make up to five places available for admission into the Hotel and Food Administration major of the Bachelor of Commerce program for graduates of the three-year Hospitality and Tourism Administration program at Centennial College. Applicants must have a minimum 3.0 (B+) grade point average and have completed an OAC credit or equivalent in Mathematics and English. Upon admission, students will be granted 11.00 transfer credits towards the degree. Interested students should contact the Bachelor of Commerce program counsellor for further information.

#### **Bachelor of Commerce - Marketing**

An articulation agreement between the Bachelor of Commerce program at the University of Guelph and the Co-op Marketing Diploma at Centennial College facilitates the transfer of students between the two institutions. Students are provided with the opportunity to complete the degree at the University of Guelph and the diploma from Centennial College. Applicants transferring from the College may begin their studies at the University commencing in the Winter semester, in the second year of the Marketing Management major. Interested students should direct their enquiries to the program counsellor for the Bachelor of Commerce program.

### **Conestoga College Institute of Technology and Advanced Learning**

#### **Bachelor of Commerce - Agricultural Business, Housing and Real Estate Management, Hotel and Food Administration, Management Economics in Industry and Finance, Marketing Management**

The University of Guelph will make up to three spaces available annually in the above programs to qualified graduates from the following programs at Conestoga College Institute of Technology and Advanced Learning: Business Administration - Marketing, Management Studies, Accounting; General Business; Food and Beverage Management; Computer programmer/Analyst. Applicants to the degree program must have completed an OAC credit or equivalent in English and Calculus (or other OAC Mathematics for HAFA).

The number of advanced standing transfer credits will range from 5.00 to 10.00 credits and vary depending upon the program completed at Conestoga. Prospective applicants should contact Admission Services for details.

### **Fanshawe College**

#### **Bachelor of Landscape Architecture**

An articulation agreement between Fanshawe College and the University of Guelph provides up to five places per year for graduates of the Landscape Design program (Landscape Design Diploma) who have a minimum cumulative grade point average of B (70.00%). Actual number accepted will be based on qualifications of applicants and existing class size. Applicants are required to possess OAC or equivalent credits in Mathematics, Biology, and English. Upon admission, Fanshawe College students will receive 10.00 transfer credits. A minimum of 10.00 credits must be completed at the University of Guelph. Prospective applicants should contact the Bachelor of Landscape Architecture program counsellor for further information.

#### **Bachelor of Science in Environmental Sciences**

The University of Guelph and Fanshawe College have signed an articulation agreement which will place up to ten students graduating from the three year programs in Environmental Technology and Environmental Science Laboratory Technology in the Bachelor of Science in Environmental Sciences program at Guelph. Applicants must have a minimum B+ (75%) grade point average. Successful applicants will receive, upon admission, ten (10.00) transfer credits. Details of the application process are available from the B.Sc. (Env.) program counsellor's office.

Interested students should contact the program counsellor for further information prior to submitting a formal application for admission.

### **Georgian College Institute of University Partnerships and Advanced Studies**

#### **Bachelor of Commerce - Hotel and Food Administration**

The articulation agreement between the University of Guelph and Georgian College Institute of University Partnerships and Advanced Studies makes available up to five places for graduates of the three-year Hotel and Resort Administration program. Successful applicants with a minimum 3.0 (B+) grade point average who have completed an OAC credit or equivalent in Mathematics and English will be admitted with 11.00 transfer

credits to the Hotel and Food Administration major of the Bachelor of Commerce program. Interested students should contact the Bachelor of Commerce program counsellor for further information.

### **Humber College Institute of Technology and Advanced Learning**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph and Humber College Institute of Technology and Advanced Learning have signed an articulation agreement which will allow students graduating from the two-year Hospitality and Restaurant Management program with a minimum 3.0 (B+) grade point average and who have completed an OAC or equivalent Mathematics and English to be admitted to the Hotel and Food Administration major of the Bachelor of Commerce program with 6.00 transfer credits. Up to five places will be made available. Interested students should contact the Bachelor of Commerce program counsellor.

### **Kemptville College**

#### **Bachelor of Commerce - Hotel and Food Administration**

Graduates from the two-year Food and Nutrition Diploma program with a minimum grade point average of 3.0 (B+) may apply to transfer to the Hotel and Food Administration major of the Bachelor of Commerce program. Applicants must have completed an OAC credit or equivalent in Mathematics and English. Upon admission up to 6.00 advanced standing credits may be transferred. Interested students should contact the program counsellor for the Bachelor of Commerce program.

### **La Salle College - Quebec**

#### **Bachelor of Commerce - Hotel and Food Administration**

The articulation agreement between the University of Guelph and La Salle College makes available up to five places for graduates of the two-year Foodservice and Restaurant Management and the two-year Hotel Management programs. Successful applicants with a minimum 3.0 (B+) grade point average who have completed an OAC credit or equivalent in Mathematics and English will be admitted with 7.50 transfer credits to the Hotel and Food Administration major of the Bachelor of Commerce program. Prospective applicants should contact the Bachelor of Commerce program counsellor for further information.

#### **Bachelor of Commerce - Hotel and Food Administration**

The articulation agreement between the University of Guelph and La Salle College makes available up to five places for graduates of the three-year Hotel and Restaurant Management program. Successful applicants with a minimum 3.0 (B+) grade point average who have completed an OAC credit or equivalent in Mathematics and English will be admitted with 7.50 transfer credits to the Hotel and Food Administration major of the Bachelor of Commerce program. Prospective applicants should contact the Bachelor of Commerce program counsellor for further information.

### **Loyalist College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph and Loyalist College have signed an articulation agreement which will allow students graduating from the two year Hotel and Restaurant Management program with a minimum 3.0 (B+) cumulative grade point average and who have completed an OAC or equivalent course in Mathematics and English to be admitted to the Hotel and Food Administration major of the Bachelor of Commerce program with 6.00 transfer credits. Interested students should contact the Bachelor of Commerce program counsellor for further information.

### **Niagara College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph will make up to five places available for admission into the Hotel and Food Administration major of the Bachelor of Commerce program for graduates of the two-year Hospitality program at Niagara College. Applicants must have a minimum 3.0 (B+) grade point average and have completed an OAC credit in Mathematics and English. Upon admission, students will be granted 6.00 transfer credits. Applicants are advised to contact the program counsellor for the Bachelor of Commerce program for additional information.

### **Nipissing University**

The Senate of Nipissing University has committed to admit no fewer than 20 Child, Youth and Family graduates from the Bachelor of Applied Science program at the University of Guelph to their Primary/Junior Bachelor of Education program. Applicants must have a minimum overall standing of B (75%) in the major. Interested students should contact Nipissing directly about admissions and preferred electives.

### **Northern Alberta Institute of Technology**

The articulation agreement between the University of Guelph and the Northern Alberta Institute of Technology (NAIT) will provide up to six places per year for graduates of the Landscape Architecture program at NAIT, with a minimum cumulative average of B (70%), to be considered for admission to the Bachelor of Landscape Architecture program at the University of Guelph. Applicants are required to possess OAC or equivalent credits in Mathematics, Biology, and English. Upon admission, students will receive 10.00 transfer credits.

Prospective applicants should contact the Bachelor of Landscape Architecture program counsellor for further information.

### **Province of British Columbia**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph will make available up to ten places annually for admission into the Hotel and Food Administration major of the Bachelor of Commerce program for graduates from the Province of British Columbia's two-year Hospitality Management Diploma programs at Camosun College, College of New Caledonia, University College of the Cariboo, Douglas College, Malaspina University College, North Island College, Okanagan University College, Selkirk College, and Vancouver Community College.

Applicants must have a minimum 3.0 (B+) cumulative grade point average and must have completed an OAC or equivalent course in Mathematics and English. Upon admission, students will be granted up to 10.00 transfer credits on the basis of having completed all college core courses as well as specified electives. Interested students should contact the Bachelor of Commerce program counsellor for further information.

### **Red River College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The University of Guelph and Red River Community College have signed an articulation agreement which provides an opportunity for the graduates from the two-year Hotel and Restaurant Administration program who have a minimum 3.0 (B+) cumulative grade point average and who have completed an OAC or equivalent course in Mathematics and English to be considered for admission to the Hotel and Food Administration major of the Bachelor of Commerce program with up to 10.00 transfer credits. Interested students should contact the Bachelor of Commerce program counsellor for further information.

### **Redeemer College**

#### **Bachelor of Science**

The articulation agreement between the University of Guelph and Redeemer College makes available up to five places annually for students from Redeemer who have completed a minimum of two years of the science program with special emphasis in Chemistry and who have achieved a minimum B average on the University of Guelph grading scale. Applicants must be recommended by Redeemer College faculty for transfer. Students admitted with 10.00 or more credits from Redeemer may expect to graduate within two calendar years with an honours B.Sc. degree. Interested students should contact either the program counsellor for the College of Physical and Engineering Science or the Chair of the Department of Chemistry and Biochemistry.

### **Seneca College**

#### **Bachelor of Commerce - Hotel and Food Administration**

The articulation agreement between the University of Guelph and Seneca College provides an opportunity for graduates from the Travel and Hospitality Option of the Travel and Tourism Studies Diploma program with a minimum grade point average of 3.0 (B+) to be considered for admission to the Hotel and Food Administration major of the Bachelor of Commerce program with 3.00 advanced standing transfer credits. Applicants must have completed an OAC credit or equivalent in Mathematics and English. Prospective applicants should contact the Bachelor of Commerce program counsellor.

#### **Bachelor of Commerce - Housing and Real Estate Management**

The articulation agreement between the University of Guelph and Seneca College provides an opportunity for students graduating from the Real Property Administration Diploma Program with a minimum grade point average of 3.5 (B+) to be considered for admission to the bachelor of Commerce, Housing and Real Estate Management major with a 5.0 advanced standing transfer credits. Applicants must have completed OAC or 12U English and Mathematics (or their equivalent i.e. some college level math and communications courses may be considered to fulfill this requirement.) Prospective applicants should contact the Bachelor of Commerce Program counsellor.

#### **Bachelor of Science**

An articulation agreement with Seneca College enables graduates with a minimum B+ (75%) average, from the following three-year diploma programs, to transfer to the Bachelor of Science program at the University of Guelph with 7.50 transfer credits: Biological Research Technologist, Chemical Technology, Laboratory Technology-Industrial Biotechnology, Pharmaceutical (Chemical) Technology.

Students should contact the program counsellor for the College of Physical and Engineering Science for further information.

#### **Bachelor of Science in Environmental Sciences**

The articulation agreement between the University of Guelph and Seneca College makes available up to ten (10) places per year for graduates of the three year program, primarily, but not exclusively, from the Chemical Technology Diploma program in the School of Biological Sciences and Applied Chemistry, Faculty of Technology. Seneca College graduates will have the option of entering the Earth and Atmospheric Sciences, Environmental Monitoring and Analysis, Environmental Protection, or Environmetrics majors in the Bachelor of Science in Environmental Sciences degree program.

Candidates require a minimum cumulative grade point average of B+ (75%) to be considered for admission. Applicants must possess the equivalent to OAC Calculus, Chemistry, Biology, and Physics. Upon admission students will be granted 10.00 transfer credits. Prospective applicants should contact the program counsellor for the B.Sc. (Env.) program for further information regarding choice of major and degree completion requirements prior to making a formal application for admission.

### Sir Sanford Fleming College

#### Bachelor of Science in Environmental Sciences

The articulation agreement between the University of Guelph and Sir Sanford Fleming College makes available up to ten (10) places per year for graduates of the three year program, primarily, but not exclusively, from the Cartographic Technology, Ecosystem Management Technology, Fish and Wildlife Technology, Terrain and Water Resources Technology, Geotechnical Engineering Technology, and Minerals Engineering Technology programs. Sir Sanford Fleming College graduates will have the option of entering the Earth and Atmospheric Sciences, Ecology, Environmental Geography, Environmental Protection, or Natural Resources Management majors in the Bachelor of Science in Environmental Sciences degree program.

Candidates require a minimum cumulative grade point average of B+ (75%) to be considered for admission. Applicants must possess the equivalent to OAC Calculus, Chemistry, Biology, and Physics. Upon admission students will be granted 10.00 transfer credits. Prospective applicants should contact the program counsellor for the B.Sc. (Env.) program for further information regarding choice of major and degree completion requirements prior to making a formal application for admission.

### Six Nations Polytechnic

The University of Guelph, along with four other universities, has entered into a partnership with Six Nations Polytechnic in the community of Six Nations to offer first-year transfer credits at any of the universities within the consortium if the student is admitted. Applicants should contact Admission Services about admission requirements and specific transfer credits.

### St. Lawrence College

#### Bachelor of Commerce - Hotel and Food Administration

The University of Guelph and St. Lawrence College have signed an articulation agreement which will allow students graduating with a minimum 3.0 (B+) grade point average from the two-year Hotel and Restaurant Management program to be admitted to the Hotel and Food Administration major of the Bachelor of Commerce program with 5.00 advanced standing transfer credits. Applicants must have completed an OAC credit or equivalent in Mathematics and English. Interested students should contact the Bachelor of Commerce program counsellor.

### 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 on-line at [http://www.uoguelph.ca/diploma\\_calendar/](http://www.uoguelph.ca/diploma_calendar/).

### Communication of Admission Decisions

Admission Services will use the mailing address and/or email addresses supplied by the applicant to communicate decisions. 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, if they have not applied to a limited enrolment program. All 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 will be made. An applicant who submits an official post-secondary transcript at the conclusion of his/her fall semester of the 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 Admissions Committee for the degree program to which the student is admitted. Official final transcripts will be required by the University of Guelph 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 Bachelor of Landscape Architecture program and the D.V.M. Program will not be made until after the deadline date for receipt of applications and documentation. Decisions will be communicated to applicants approximately one month after that date.

### Co-operative Education

Students will be considered for admission to semester one of the Co-operative Education program upon completion of the Ontario Secondary School Diploma, including six OACs, grade 12 U and/or grade 12 U or 12M courses (or equivalent). Normally, an average of 75% 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. Applicants to the Co-operative Education programs must have Permanent Resident status in Canada or be a Canadian citizen. Applicants who are U.S. citizens should contact Co-operative Education and Career Services.

Specific subject requirements for admission to the various degree programs are outlined following this 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 the form 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. Please refer to Co-operative Education Programs in Section X for further information.

### Deadline Dates - Advanced Standing, Non-Degree and Limited Enrolment 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.

PROGRAM & MAJOR FALL SEMESTER	APPLICATION DEADLINE	DOCUMENT DEADLINE
B.L.A.	March 1	April 15 - Portfolio/B.I.S. May 15 - Transcripts
D.V.M.	February 1	May 15 - B.I.F. June 15 - Documents
International D.V.M.	December 1	February 1
DTM	January 15	February 15
All other programs and major areas of study	May 1	June 1

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

APPLICANTS SHOULD NOTE THAT THESE ARE FIRM DEADLINE DATES AND EXTENSIONS WILL NOT NORMALLY BE GRANTED.

### 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 less 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. The University reserves the right to deny admission to applicants who do not demonstrate satisfactory facility in English, regardless of academic qualifications.

Applicants required to meet the English Proficiency Requirement must do so by submitting the required scores in one of the following tests or battery of tests as outlined in points 1, 2, 3 or 4 to the left. Test results must be submitted to Admission Services prior to admission by the published document deadline.

#### 1. Test of English as a Foreign Language (TOEFL)

600 on the paper-based test (250 on the computer test) AND Test of Written English (TWE) - 5 AND Test of Spoken English (TSE) - 50. For 2005-2006, the internet-based Test requirement is a total score of 89 with no section less than 21.

These tests are offered on several dates each year by centres throughout the world. The TOEFL Bulletin of Information and registration form can be obtained by writing or contacting TOEFL/TSE Publications, P.O. Box 6154 Princeton, New Jersey 08541-6154, USA; telephone (609)771-7100; email [toefl@ets.org](mailto:toefl@ets.org); Website (<http://www.toefl.org>).

#### 2. International English Language Testing System (IELTS)

Minimum overall score of 6.5 with no band less than 6. Information on test centres and registration can be obtained from IELTS Administrator, Anglia Polytechnic University, East Road, Cambridge CB1 1PT, Great Britain (telephone (01223) 363271; facsimile(01223) 352973; email [j.m.ferra@anglia.ac.uk](mailto:j.m.ferra@anglia.ac.uk)); <http://www.ielts.org/>.

### 3. The Michigan English Language Assessment Battery (MELAB)

Minimum overall score of 85 is required, a minimum composition score of 83. In addition, applicants must present a minimum score on the oral test of 3.

Information on the MELAB is available at <http://www.lsa.umich.edu/eli/melab.htm>.

Applicants can request Information Bulletins and Registration forms from English Language Institute, Testing and Certification Division, 3020 North University Building, The University of Michigan, Ann Arbor, Michigan 48109-1057, USA (telephone (734) 763-3452; facsimile (734) 763-0369; Website <http://www.lsa.umich.edu/eli/>).

### 4. Canadian Assessment of English Language (CAEL)

A minimum overall band score of 70 is required. Information on the CAEL is available at <http://www.cael.ca/>

## Open Learning

The Open Learning program is an open admission distance-only mode of study program which provides access to university courses for individuals who wish to study independently and who are not interested in pursuing a degree at the present time. This program is designed to extend the academic resources of the University to individuals who wish to take courses for personal enrichment, professional updating or eventual application to a degree program.

No limit applies to the total number of distance education courses taken through Open Learning although students may enrol in a maximum of three (3) courses per semester.

Students wishing to apply to transfer from Open Learning to a degree program, should contact Admission Services to obtain admission information specific to the degree program of their choice.

All students must have completed any specific subject requirements, or equivalents, and their academic record must meet the requirements for continuation of studies. The academic record from any previous post-secondary experience will also be considered in determining admissibility. Applicants must also satisfy the English Proficiency requirements as outlined in the following section.

For some programs, performance in specific required courses or portfolios or required background experience, where applicable, may be a consideration for admission. For all programs, where qualified applicants exceed the number of spaces available, admission decisions will be made on a competitive basis.

Individuals wishing to apply to Open Learning should contact the Office of Open Learning for application forms and further information.

## 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 a Letter of Permission from the Registrar, Dean or program supervisor of the home institution authorizing a program selection.

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, Section 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 Undergraduate Program 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 an OUAC 105 Online Application Form using code GND. An applicant who has ever registered at the University of Guelph should apply online as a Non-Degree Internal Transfer 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 graduate with a second undergraduate degree from the University of Guelph. If they have graduated with their first degree, they must apply for admission to the program for their second degree. A maximum of 10.00 credits may be transferred from the initial degree program. The course content of the second degree program must be substantially different from that of the first. If University of Guelph students apply to graduate with two different degrees at the same convocation, only 10.00 credits may be transferred from the registered program to the undeclared program. Note: A second degree is judged to be substantially different if:

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

## 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 honours 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 section (IV - Application Procedures). All previous University of Guelph credits may be utilized toward the equivalent degree from the honours 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 at the time of admission into the continuing category.**

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

At the University of Guelph, Prior Learning Assessment 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, the student can challenge the appropriate specific course(s) offered by the University to a maximum of 5.00 credits in a degree program or 30% of the curriculum for Open Learning Certificates. This is a post admission process only.

Each academic department is responsible for determining which of its courses may be subject to PLA challenge. The challenge process could include one or more assessment methods, including standardized tests, written and/or oral examinations, performance evaluations, interviews, and portfolio assessments. These assessments require that the individual demonstrate, to a qualified faculty member, that pre-determined knowledge and skills have been acquired.

Students should contact Undergraduate Program Services ([ups@registrar.uoguelph.ca](mailto:ups@registrar.uoguelph.ca)) 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.

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. They registered in a program 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 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 sub-sections regarding appropriate admission requirements and deadline dates in this Section (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 program counsellor regarding procedures and criteria for readmission to that program.

Students apply for readmission online via the Ontario Universities' Application Centre as an Internal Transfer/Readmission student. An application fee is payable at the time the application is submitted. Refer to <http://www.uoguelph.ca/admissions/prospective/intransfer/index.shtml> for further information.

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 (one full-year

course) provided they meet the criteria for readmission and the criteria for the transfer of credit.

- 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.
- 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, be it distance or on-campus, taken in open learning programs from either our university or at another university.

## 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 quota, 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 Admissions 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 Admissions Committee to deny readmission. Refer to Readmission in Section 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 <http://www.uoguelph.ca/admissions/index.shtml>

## 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 Landscape Architecture  
 Bachelor of Science  
 Bachelor of Science in Agriculture  
 Bachelor of Science in Engineering  
 Bachelor of Science in Environmental Sciences  
 Bachelor of Science in Technology  
 Doctor of Veterinary Medicine

While specific subjects are listed under the new OSS Curriculum, it is expected that some applicants may still present both OACs and Grade 12U and 12M courses. Students are advised to avoid course content duplication if they will be presenting courses from both the OAC and OSS curriculum. If two courses are presented which are deemed to be equivalent, only one will be used in calculating the admission average (e.g. OAC Calculus and 12U Advanced Functions and Introductory Calculus). The Non-Academic component of grade 12U/M co-op courses is not accepted as a contribution to admission requirements.

Out of province applicants should visit <http://www.uoguelph.ca/admissions/outofprov> for applicable subject requirements. Students applying with educational credentials obtained outside of Canada should consult <http://www.uoguelph.ca/admissions/equivalency>.

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

#### Child, Youth and Family; Gerontology

OSS Curriculum: ENG 4U; 1 credit in a 4U Mathematics; SBI 4U or SCH 4U; 3 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Mathematics; 1 credit in Chemistry or Biology; 3 additional credits.

#### Applied Human Nutrition

OSS Curriculum: ENG 4U; 1 credit in a 4U Mathematics; SBI 4U; SCH 4U; 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Mathematics; 1 credit in Chemistry; 1 credit in Biology; 2 additional credits.

#### Recommendations and Notes:

- Applicants are strongly advised to include MCB 4U or OAC Calculus in their programs of study.

- Students selecting a major in Child, Youth and Family or Gerontology should include Biology at the Grade 4U level or OAC.

### Bachelor of Arts--B.A.

OSS Curriculum: ENG 4U; 5 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements - 1 credit in English I; 5 additional credits.

#### Recommendations and Notes:

- All applicants are strongly encouraged to offer a credit in Mathematics or a credit in French (or other language) among the additional five credits.
- Students planning on entering programs in the Social Sciences, Mathematical Sciences and Computing and Information Science are strongly advised to include one or more Mathematics courses, such as Calculus.

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

OSS Curriculum: ENG 4U; MCB 4U; 2 4U credits from SBI 4U, SCH 4U, SPH 4U or MGA 4U; 1 4U or 4M Arts or Social Science; 1 additional 4U or 4M credit.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 2 credits from Biology, Chemistry, Physics, Algebra and Geometry; 1 credit from Arts/Social Science; 1 additional credit.

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

OSS Curriculum: ENG 4U; SBI 4U; 4 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in OAC English, 1 credit in Biology, 4 additional credits.

- All applicants are encouraged to include a 4U Math.

### Bachelor of Commerce--B.Comm.

#### Agricultural Business, Management Economics in Industry and Finance, Marketing Management

OSS Curriculum: ENG 4U; MCB 4U; 4 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 4 additional credits.

#### Hotel and Food Administration, Real Estate and Housing, Human Resources Management, Public Management, Tourism Management

OSS Curriculum: ENG 4U; 1 credit in a 4U Mathematics; 4 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Mathematics; 4 additional credits.

#### Recommendations and Notes:

- Hotel and Food Administration and Tourism Management: Applicants are considered on the basis of academic performance and review of a Background Information Sheet submitted to the Admissions Committee. Any 4U or OAC Mathematics credit is acceptable. The application deadline date for the Hotel and Food Administration and Tourism Management majors is March 1. Late applications may be considered if spaces are available.
- Marketing Management: If available, students are encouraged to include Economics and/or Administrative or Organizational Studies and/or Accounting among their 4U or 4M or OAC credits.
- Real Estate and Housing: Calculus is recommended.

### Bachelor of Computing--B.Comp.

OSS Curriculum: ENG 4U; MCB 4U; 4 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 4 additional credits.

#### Recommendations and Notes:

- 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 Landscape Architecture--B.L.A.

OSS Curriculum: ENG 4U; SBI 4U; 1 4U credit in Mathematics; 1 credit from a 4U or 4M Geography, Visual Arts, French, a Level 4 International Language or a Level 3 Classical Language; 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Biology; 1 credit in Mathematics; 1 credit from Geography, Visual Arts, French or Français or another language; 2 additional credits.

#### Recommendations and Notes:

- Students are strongly advised to include Chemistry or Physics in their program of studies. Applicants are considered on the basis of academic performance, a review of a Background Information Sheet and portfolio. Application forms must be received by March 1. Please refer to the deadline dates for the Background Information Form, portfolio and transcripts at the end of this chapter under the heading Deadline Dates - Advanced Standing, Non-Degree and Limited Enrolment Programs.

### **Bachelor of Science--B.Sc.**

OSS Curriculum: ENG 4U; MCB 4U; 2 4U credits from SBI 4U, SCH 4U, SPH 4U, or MGA 4U; 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 2 credits from Biology, Chemistry, Physics, Algebra and Geometry; 2 additional credits.

#### **Recommendations and Notes:**

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

1. Their eventual specialization.
2. Regulation I on Introductory Courses, Section IX-B.Sc. Applicants who lack one specific 4U or OAC requirement but who have a high overall academic standing are encouraged to apply for admission to the regular (non-coop) program.
3. Students contemplating admission to the D.V.M. Program should include the following 4U or OAC credits: Biology, Physics and Chemistry.
4. Applicants to Biological, Food and Nutritional and Nutraceutical Sciences are advised to include Biology, Chemistry and Physics among their 4U or OAC credits.
5. OAC Algebra & Geometry or MGA 4U, Chemistry and Physics are strongly recommended for Mathematical, Computer and Physical Sciences.

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

OSS Curriculum: ENG 4U; MCB 4U; 2 4U credits from SBI 4U, SCH 4U, SPH 4U, or MGA 4U; 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 2 credits from Biology, Chemistry, Physics, Algebra and Geometry; 2 additional credits.

#### **Recommendations and Notes:**

1. Students contemplating admission to the D.V.M. Program should present 4U or OAC Physics, Biology and Chemistry.
2. Students who are lacking a specific 4U or OAC subject requirement but who have a high overall academic standing are encouraged to apply for admission.

### **Bachelor of Science in Engineering--B.Sc. (Eng.)**

OSS Curriculum: ENG 4U; MCB 4U; 2 4U credits from SBI 4U, SCH 4U or SPH 4U; 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 2 credits from Physics, Chemistry, Biology; 2 additional credits.

#### **Recommendations and Notes:**

1. All applicants are encouraged to include both 4U or OAC Physics and Chemistry in their course credits.
2. Applicants are considered on the basis of academic performance and a review of a Student Profile Form submitted to the B.Sc. (Eng.) Admissions Committee. In addition, due to the nature of the program, personal interviews and/or special tests may be used to assist in the selection of candidates. Differential criteria may prevail for admission to the various B.Sc. (Eng.) programs. Students who are admitted but lack specific required courses must complete replacement courses available at the University which do not all count towards the 23.50 credits required for the B.Sc. (Eng.) program. Students intending to enrol in these courses should consult the timetable and Section 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 and 0.50 may be counted for credit in the degree.
4. Students selecting a major in Environmental and Biological Engineering are advised to include Physics, Chemistry and Biology in their program of study. Students intending to major in Water Resources Engineering should include Physics, Chemistry and 1 of Biology or Computer Studies. Engineering Systems and Computing majors should include Physics, Chemistry and Computer Studies.

### **Bachelor of Science in Environmental Sciences--B.Sc. (Env.)**

OSS Curriculum: ENG 4U; MCB 4U; 2 4U credits from SBI 4U, SCH 4U, SCM 4U, 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 2 credits from Physics, Chemistry, Biology; 2 additional credits.

#### **Recommendations and Notes:**

1. To be best prepared for semester 1 of the program, all applicants are advised to include 4U or OAC Biology, Chemistry, and Physics.
2. Students interested in Environmental Geography or Natural Resources Management should consider 4U or OAC Geography in their program of study.
3. 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 admissions counsellor. This deficiency must be resolved in the first year of the program.

### **Bachelor of Science in Technology--B.Sc. (Tech.)**

OSS Curriculum: ENG 4U; MCB 4U; 2 4U credits from SBI 4U, SCH 4U, SPH 4U or MGA 4U; 2 additional 4U or 4M credits.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English I; 1 credit in Calculus; 2 credits from Biology, Chemistry, Physics, Algebra and Geometry; 2 additional credits.

#### **Recommendations and Notes:**

1. It is highly recommended that students interested in the Physics and Technology program take MGA 4U or OAC Algebra and Geometry and SPH 4U.
2. It is highly recommended that students interested in the Pharmaceutical Chemistry program take 4U or OAC Chemistry.

### **Doctor of Veterinary Medicine-D.V.M.**

The class size in the Doctor of Veterinary Medicine (D.V.M.) Program is limited to approximately 110 students.

#### **Academic Requirements**

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

1. Biological Sciences - 1.50 credits (3 semester courses, with recommended emphasis on Animal Biology; one must be a Cell Biology)
2. Genetics - 0.50 credit (1 semester course)
3. Biochemistry - 0.50 credit (1 semester course)
4. Statistics - 0.50 credit (1 semester course with a Calculus prerequisite)
5. 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).**

\*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.ovc.uoguelph.ca/Undergrad/potential/admission.shtm>. 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 seek admission to the Bachelor of Science or the Bachelor of Science in Agriculture programs. Students who wish to undertake their preparatory work at another university should select an institution that offers the specific course requirements listed above as part of a degree program and that has rigorous entrance requirements and a reputation for academic quality.

Applications will also be considered from persons who have successfully completed a science graduate program and from persons currently enrolled in a science 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), MCAT scores, 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 information and an interview. Normally a maximum of five students may 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.

#### **Credit Requirements**

Students contemplating admission to the D.V.M. Program should include 4U English, 4U Biology, Chemistry, and Physics and 4U Advance Functions and Introductory Calculus in their program of studies or it may not be possible to complete the D.V.M. Program admission requirements and courses required for the MCAT during the first two years of university study.

#### **Residence Requirements**

Canadian citizens or individuals who have Permanent Resident Status of at least one year's duration. In addition, all domestic applicants must 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. Consideration will be given to a small number of exceptional applicants who are residents of Quebec.

## International Applicants

International students are admitted to the D.V.M. Program. Applicants may not hold Canadian citizenship or permanent resident status in Canada. Normally, a maximum of five international seats will be available in any one year.

The application deadline date for international applicants is December 1st, for September entry to the D.V.M. Program.

## 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 and MCAT results. 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. An applicant who is not following a prescribed program of study may be required to submit an explanation of his or her course selections.

The Medical College Admission Test (MCAT) will be used for selection of domestic applicants. International applicants may submit GRE scores in lieu of MCAT scores. The MCAT may be taken in April or August of each year. The deadline date for receipt of MCAT scores is June 15 of the year of intended admission to the D.V.M. Program. For more information on the MCAT, prospective applicants should contact MCAT Program Office, P.O. Box 4056 Iowa City, Iowa, USA, 52243-4056, telephone (319) 337-1357.

A complete description of the MCAT is contained in the MCAT student manual available from the Association of American Medical Colleges, Dept. 66, Washington, D.C. USA, 20055, telephone (202) 828-0416. The manual presents: areas in science and specific skills to be assessed by the test; the mathematical concepts required; general suggestions for preparing for and taking the test; a full-length practice test. Your preparation for the MCAT should begin with a careful reading of the student manual. Note that science topics covered on the test include basic principles and concepts in biology, general chemistry, organic chemistry and physics.

### 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 situations such as industry (e.g. veterinary products, pharmaceutical), research and academia (universities), and government (e.g. public health, regulatory affairs). 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. There is an expectation that a minimum two of the three references that applicants select will 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. Interviews give candidates an opportunity to display their ability to communicate effectively and give the interviewers an opportunity

to assess candidates' attitudes and attributes applicable to veterinary medicine. Applicants should be prepared to elaborate on statements made in the Background Information Form, to discuss their reasons for choosing veterinary medicine as a career, and to describe what they have done to affirm their career choice and to prepare themselves for admission. They should be prepared to discuss issues pertaining to husbandry, care and welfare of a variety of animal species. Applicants may be asked to describe the duties and responsibilities of veterinarians and the scope of veterinary medicine. 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 basic level of literacy. 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 is 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 use 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. Technical Skills

Students entering the D.V.M. Program must have observation and motor skills which necessitate the functional use of all senses. Applicants must declare disabilities which might interfere with observation and motor skills and their ability to elicit information by

palpation, auscultation, percussion and other diagnostic manoeuvres, procedures, or perform general and emergency care of patients.

### Application Procedure

Domestic applicants currently registered at the University of Guelph must obtain an internal application for transfer or readmission from Admission Services on-line at <http://www.uoguelph.ca/liaison/internal.shtml>. All other domestic applicants must apply using the Ontario Universities Application Centre by accessing the computerized application service <http://compass.ouac.on.ca>.

International applicants should apply through the Veterinary Medical College Application Service (VMCAS). For further details see <http://aavmc.org/vmcas/vmcas.htm>. Alternatively, international applicants can apply using the University of Guelph International Application found at <http://www.uoguelph.ca/admissions/download/index.shtml>.

### 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 February 1. Academic transcripts and other supporting documents must be received no later than June 15.

The deadline for International applicants using the VMCAS application is October 1. Those applying directly to the University of Guelph must apply by December 1 and supporting documentation must be submitted by February 1.

### Application Limitation

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

### Request 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.

### Admission with Advanced Standing

Applications for admission to advanced semesters will be considered from students who have been enrolled in D.V.M. Programs at other institutions, subject to the availability of places in the D.V.M. Program and the academic standing of the candidate. In no case will admission be considered beyond the fifth semester. When places are available, candidates may be asked to present themselves for interview and may be asked to pass examinations on subject matters in the veterinary curriculum. Applicants are advised that *vacancies are rare*. The application deadline date for advanced standing applicants is February 1.

### 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

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

- Bachelor of Applied Arts
  - Media Studies
- Bachelor of Applied Computing in Distributed Computing and Communication Systems Technology
- Bachelor of Applied Science
  - Early Childhood Services
  - Family and Community Social Services
  - Gerontology
  - Justice Studies
- Bachelor of Business Administration

### Bachelor of Applied Arts--B.A.A.

#### Media Studies

The Bachelor of Applied Arts program is an integrated degree-diploma program offered only at the University of Guelph-Humber campus.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English; 5 additional credits.

New OSS Curriculum: 1 Grade 12U English; 5 additional Grade 12U or 12M credits.

### Recommendations and Notes:

Non-Academic Requirements include an interview, a portfolio evaluation, and a writing test.

### Bachelor of Applied Computing in Distributed Computing and Communication Systems Technology--B.A.Comp. (D.C.C.T.)

The Bachelor of Applied Computing in Distributed Computing and Communication Systems Technology program is an integrated degree-diploma program offered only at the University of Guelph-Humber campus.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English; 1 credit in Calculus; 4 additional credits.

New OSS Curriculum: Grade 12U English; Advanced Functions and Introductory Calculus; 4 additional Grade 12U or Grade 12M credits.

### Recommendations and Notes:

Applicants are encouraged to include an additional math credit in their program of study.

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

#### Early Childhood Services

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English, 1 credit in Mathematics, 1 credit in Science; 3 additional credits

New OSS Curriculum: Grade 12U English; 1 Grade 12U Mathematics; 1 Grade 12U Science; 3 additional Grade 12U or Grade 12M credits

### Recommendations and Notes:

Applicants are strongly advised to include Biology in their program of study.

### Family and Community Social Services

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English; 1 credit in Mathematics; 4 additional credits

New OSS Curriculum: Grade 12U English; 1 Grade 12U Mathematics; 4 additional Grade 12U or Grade 12M credits

### Gerontology

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English; 1 credit in Mathematics; 1 credit in Biology or Chemistry; 3 additional credits

New OSS Curriculum: 1 grade 12U English, 1 grade 12U mathematics, 1 Grade 12U Biology or Chemistry; 3 Additional grade 12U or grade 12M credits

### Recommendations and Notes:

Applicants are advised to include Biology among their Grade 12 credits.

### Justice Studies

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English; 1 credit in Mathematics; 4 additional credits

New OSS Curriculum: 1 grade 12U English; 1 Grade 12U mathematics; 4 additional Grade 12U or Grade 12M credits

### Bachelor of Business Administration--B.B.A.

The Bachelor of Business Administration program is an integrated degree-diploma program offered only at the University of Guelph-Humber campus.

OAC Curriculum: Ontario Academic Course Credit Requirements: 1 credit in English; 1 credit in Mathematics; 4 additional credits.

New OSS Curriculum: Grade 12U English; 1 credit in Grade 12U Mathematics; 4 additional Grade 12 U or Grade 12M credits.

### Recommendations and Notes:

Applicants are strongly advised to include Advanced Functions and Introductory Calculus in their program of study.

## 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. Applications with incomplete documentation after the document deadline date will not receive consideration.

1. Ontario Secondary School Diploma or equivalent Senior Matriculation Certificates, (i.e. 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. Birth Certificate (only for students applying under Mature Student Regulation).
3. Official transcripts of all academic work taken at the post-secondary level, e.g. university, college, nursing, etc.
4. Transcript of marks from the last secondary school attended.
5. Any other documents demonstrating academic results or ability, or explaining the level of academic performance.

6. Any supplementary information required as part of the application.

## **Use of Animals in Teaching**

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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

### Exchange Programs

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 Section VIII--Undergraduate Degree Regulations and Procedures. For further information on any study abroad program, visit the InfoCentre, Centre for International Programs, Level 3, University Centre. The University of Guelph has official student exchange agreements with the following institutions:

#### Australia

Australian International Hotel School  
Curtin University  
Deakin University  
Edith Cowan University  
Griffith University  
La Trobe University  
University of Adelaide  
University of Canberra  
University of Sydney

#### Austria

Universität für Bodenkultur Wien (BOKU)  
University of Innsbruck  
Management Centre Innsbruck

#### Caribbean

University of the West Indies

#### Denmark

- University of Copenhagen
- Royal Veterinary and Agricultural University

#### England

Keele University  
Oxford-Brookes University  
Royal Agricultural College  
University of Plymouth

#### Fiji

University of the South Pacific

#### Finland

Lahti Polytechnic

#### France

Ecole Supérieure de Commerce et de Management - Tours et Poitiers  
Institut d'Etudes Politiques (L'IEP) - Lyon II  
Institutions in the Rhône-Alpes region  
Pierre Mendès France University, Grenoble II  
University of Savoie at Chambéry  
University of Montpellier II

#### Germany

University of Freiburg  
University of Tübingen  
University of Ulm  
University of Karlsruhe  
University of Heidelberg  
University of Konstanz  
University of Rostock  
University of Mannheim  
University of Stuttgart

#### Ghana

University of Ghana

#### Hong Kong

Lingnan University

#### Iceland

University of Iceland  
University of Akureyri  
Agricultural College at Holar  
Agricultural College at Hvanneyri

#### Italy

University of Udine

#### Malaysia

Universiti Sains Malaysia

#### Malta

University of Malta

#### Mexico

Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM)  
University of Guadalajara

#### Netherlands

Wageningen University  
Maastricht University

#### New Zealand

Lincoln University  
Massey University

#### Norway

Agricultural University of Norway

#### Scotland

Heriot Watt University  
University of Aberdeen  
University of Stirling  
University of Strathclyde

#### South Africa

University of KwaZulu-Natal

#### Spain

University of La Rioja  
University of Málaga

#### Swaziland

University of Swaziland

#### Sweden

Swedish University of Agricultural Sciences  
Lund University

#### USA

Bowling Green State University  
University of Wisconsin-Madison

### International Letter of Permission--L.O.P.

The University of Guelph has established several programs under the Commonwealth Universities Study Abroad Consortium (CUSAC) whereby the University of Guelph students may study overseas on a Letter of Permission. Students participating in these programs pay tuition to the host institution and not to the University of Guelph. The Centre for International Programs administers all CUSAC, LOP programs.

For more information, visit the InfoCentre, Centre for International Programs, Level 3, University Centre.

### Semesters Abroad

Students registered in a Semester Abroad are recognized as University of Guelph students and thus fall under the rules and regulations of the University of Guelph. It should be noted however, that many study abroad semesters involve the employment of sessional faculty from abroad. While every attempt is made to fully inform these faculty of the Senate regulations concerning academic procedures and evaluation of student work, there may be times when appeals by students are not handled in a fashion that would be appropriate under the University of Guelph guidelines. It is therefore recommended that any student who wishes to submit an appeal to Academic Review or request a grade reassessment should first contact the semester abroad coordinator for advice.

It will be the responsibility of the coordinator to refer the matter through the appropriate channels. In some cases this might be to a department chair, in others, through a dean. At all times the University of Guelph's rules and procedures will be adhered to. Given the distance between the University of Guelph and the host institution, the time deadlines in place for processing requests for academic review or grade reassessments will not be enforced. Students studying on an exchange should normally expect to abide by the rules and regulations of the host institution.

The University offers the following semester abroad programs, however, **not all semester abroad programs are offered every year**. Contact the Centre for International Programs, University Centre, Level 3, for information on current offerings.

### 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.

## 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 social 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 (not to be confused with the **Universite Canadienne en France 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, in which case they are eligible for the monitor program (financial support in exchange for teaching conversational English) as well as several bursaries.

Francophone students at Guelph are also eligible for the monitor program, teaching conversational French locally. French Studies graduates may apply to the Canada France Exchange program which allows them to spend one full year in France, teaching conversational English in French high schools, as well as pursuing their studies at a French university if they so wish. For further details, contact the departmental advisor, School of Languages and Literatures, College of Arts.

## 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.

## Study Abroad Programs

University of Guelph study abroad programs consist of two types: semesters abroad and exchange programs.

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.

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

For information on these or other work or study abroad options, please contact the Centre for International Programs, University Centre, Level 3.

## VI. Schedule of Fees

All 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, to defer payment of their University account. Deferred payment normally will be granted only to students who can show proof of financial assistance from O.S.A.P. 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 O.S.A.P. 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 will be cancelled for students who have not paid or made satisfactory arrangement for payment by the 10<sup>th</sup> class day for the semester. There is a \$200.00 reinstatement fee levied for full-time students and \$100 reinstatement fee levied for part-time students wishing to register after the 10<sup>th</sup> class day. Reinstatement will not be allowed after October 15<sup>th</sup> for the Fall semester, January 31<sup>st</sup> for the Winter semester and June 15<sup>th</sup> 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:

- release of semester examination results
- release of transcripts
- granting of a degree or diploma
- 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.

## Meal Plan Fees

The Department of Hospitality Services Meal Plan fees quoted below are the 2005-2006 figures. The updated fees for 2006-2007 will be available by the end of April, 2006 via the Hospitality Services website: <http://www.hospitality.uoguelph.ca/mealplans.htm>.

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 four (4) 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 carried forward to the Ultra Food Plan. The Ultra Food Plan is a convenient, money saving meal plan designed for those students who are not required to purchase an On-Campus Meal Plan.

Size	Basic Plan	+	Flex Plan	Total Cost	Per Semester
Minimum Plan	2,230	+	400	\$2,630	\$1,315.00
Light Plan	2,470	+	600	\$3,070	\$1,535.00
Full Plan	2,650	+	800	\$3,450	\$1,725.00
Plus Plan	2,790	+	1,000	\$3,790	\$1,895.00

For more information on Hospitality's meal plans visit the Hospitality Services website <http://www.hospitality.uoguelph.ca/mealplans.htm>.

## Parking Fees

Quoted fees are in effect in 2005-2006. The 2006-2007 fee schedule will be issued as soon as available from Parking Services.

	Per Semester	Annual Rate
Students in residence	N/A	\$210.64

Students off-campus	\$107.65	\$322.98
Motorcycle	N/A	\$54.59

**Above rates are subject to change.**

## Prior Learning Assessment

<b>Application Fee</b> A fee will be charged for each application to challenge a course, irrespective of the number of courses specified in the application.	\$50.00
<b>Course Fee</b> Students who are permitted to challenge a course will be charged a fee for the course, regardless of whether or not the challenge is successful.	1/2 of the tuition fee for the course

## Refunds

### Withdrawal

A student who makes a request for Withdrawal from the University may apply to the Office of Registrarial Services for a refund of tuition fees provided the hiatus has been authorized (see also Withdrawal, Section VIII--Undergraduate Degree Regulations).

If the withdrawal or credit drop results in a credit balance in your fees account (i.e. payments are greater than charges) a refund cheque is produced. Allow four to six weeks before refunds are available from Student Financial Services. **The University has been directed by the Ministry of Training, Colleges and Universities to return refunds to the National Student Loan Centre in instances where assistance was received through a Government Student Loan.**

**Winter and Summer Semesters** - Refunds of tuition fees will be calculated according to the effective date and the following schedule:

Class Days	Refund Rate
1 - 5 inclusive	100%
6 - 10 inclusive	75%
11 - 15 inclusive	65%
16 - 20 inclusive	50%
21 - 25 inclusive	35%
26 - 30 inclusive	20%
31 and beyond	nil

**Fall Semester** - **The compulsory non-refundable Registration Deposit of \$200.00 is forfeited as the first charge against a withdrawal/cancellation or no show for the semester including the first five class days. The above schedule will only come into effect once the first \$200.00 penalty has been used up.**

Refunds of Other University Fees (except Residence and Meal Plan Fees) and Student Organization Fees (except Bus Pass, medical insurance premium and dental insurance premium, please see specific details on these fees) will be made in full up to and including the 15th class day of a semester. No refund of Other University Fees or Student Organization Fees will be made after the 15th class day. The effective date for the refund of tuition and fees will be the date on which the student notifies the Office of Registrarial Services regarding the withdrawal.

A registration payment not honoured by your bank does not constitute an official withdrawal from the University.

Room charges will be refunded on a pro rata basis for the period in residence, but cancellation of the residence contract will also result in forfeiture of all or part of the residence deposit. Refer to section 4.3 of the Residence Contract Terms & Conditions for further information. The effective date for refund will be the date belongings are removed from the room, a room check made and the room key, post office key and university ID card returned; or, the authorized effective date for withdrawal, whichever is later. Students to whom a room assignment has been made and who withdraw and subsequently re-register up to and including the 5th class day will be liable for any penalties incurred through forfeiture of the residence contract.

Meal plan fees, excluding the Capital Fund Component, will be refunded on a pro rata basis for the operating expense portion, plus the unused food portion, for authorized cancellation of a contract. The effective date for refunds will be the date on which the student notifies the Office of Registrarial Services regarding the withdrawal, except if a student withdraws before or after the first day of classes and re-registers before or on the 5th day of classes, cancellation of the contract is not permitted.

### 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 as shown above for tuition for withdrawals. Refunds of Other University Fees and Student Organization 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 Other University Fees and Student Organization Fees will be made after the 15th class day. The effective date for classification change will be the date such change is reported to the Office of Registrarial Services.

## Co-operative Education

Students must see the Policy Agreement for Student Involvement in Co-operative Education for withdrawal policies. If a student withdraws 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 Central Student Association 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 as shown above for tuition for withdrawals. The effective date for the drop action will be the date such information is reported to the Office of Registrarial Services.

## Equipment Fund for D.V.M. Students

The Equipment Fund Fee is refundable during the first 15 class days of the semester to those who do not wish to support the fund. Applications for refund are to be made at the office of the Assistant Dean O.V.C. Refunds and receipts for donations will be remitted before the end of the fall semester.

## Equipment Fund for Engineering Students

The Equipment Fund Fee is refundable during the first 15 class days of the semester to those who do not wish to support the fund. Applications for refund are to be made to the School of Engineering.

## Medical Insurance Premium

This premium 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.

## Student Society Fee for Landscape Architecture Students

Please refer to the Student Society for refund information.

## Optional Fees

OPIRG-G is refundable during the first 3 weeks of each semester to those who do not wish to support its activities. Refer to General Information Section of this Calendar. Applications for refund are to be made at the OPIRG-G offices. RADIO GRYPHON fee is refundable during the first 3 weeks of each semester to those who do not wish to support the activities. Applications for refund are to be made at the Radio Gryphon offices.

Food Bank Affordable Housing, must approach the CSA office for refund.

## 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 Fees

Quoted fees are in effect in 2005-2006. The 2006-2007 fee schedule will be issued as soon as available from Student Housing Services.

### Single Student Residence

#### Fall & Winter Semesters (two semester contract, per semester price)

Single room	\$2,160.00
Double room	\$1,965.00
Single room (suite with shared cooking facilities)	\$2,306.00
Double room (suite with shared cooking facilities)	\$2,109.00
East Townhouse (includes Utility deposit)	\$2,549.00

#### Summer Semester (one semester contract)

Single room (East townhouse)	\$2,000.00
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### Other Residence Fees

Activity fee	\$16.24
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## 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 6.2.8 of the Residence Contract requires that students vacate their rooms within 24 hours of completion of their final examination. Rates are for unfurnished units and include utilities (except telephone), parking, and satellite TV.

## Family Housing

Family Housing Fee	Per Month
1 bedroom apartment	\$748.00 - \$792.00
2 bedroom apartment	\$868.00
2 bedroom townhouse - College Ave.	\$915.00
2 bedroom townhouse - Wellington Woods	\$915.00

## Special University Fees

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

<b>Account Deferral Fee</b>	\$60.00 per occurrence
<b>B.L.A. Student Society Fee</b>	\$50.00 per semester
<b>Cheque Refusal Fee</b> For each cheque upon which payment is refused by the bank on which it is drawn.	\$60.00 per cheque in the amount of \$418.00 or greater upon which payment is refused (\$30.00 per cheque in the amount of less than \$418.00).
<b>Cheque Processing Fee</b> Applied to students receiving short term loans or OSAP advances.	\$20.00 per occurrence
<b>Distance Education Resource Fee</b> Non-refundable after the six-day add period.	\$70.00 per D.E. course
<b>Equipment Fund for D.V.M.</b> Charged to semester 1,3,5,7 students	\$50.00
<b>Equipment Fund for B.SC. (ENG.)</b> Charged per full-time semester	\$40.00
<b>Graduation Fee</b> Payable at time of submission of application for graduation. The fee covers the cost of the diploma and diploma case, and gown rental. It is applicable to all students (except those in continuing, unclassified or non degree categories) upon their first registration in the semester level as noted below: Associate Diploma in Agriculture (semester 4) All other Programs (semester 8)	\$30.00
<b>Late Graduation Fee</b> Payable at time of submission of a late application for graduation.	\$60.00
<b>Late Registration Fee</b> Payable at the time of late registration (fee payment). Appeals against the late fee must be made in writing to the Secretary of the Late Appeals Committee within 10 class days from the commencement of classes. Appeal forms are available from WebAdvisor.	\$60.00 per occurrence
<b>Official Transcript</b>	\$8.00 each copy
<b>OAC Lab Fee</b>	\$25.00 per semester
<b>Program Transfer Fee</b> For each applicant requesting a transfer from one degree program to another, or readmission.	\$40.00 per occurrence

<b>Registration Reinstatement Fee</b> Registration will be cancelled for students who have not paid or made satisfactory arrangement for payment by the 10 <sup>th</sup> class day for the semester. There is a \$200.00 reinstatement fee levied for full-time students and a \$100.00 reinstatement fee levied for part-time students wishing to register after the 10 <sup>th</sup> class day. Reinstatement will not be allowed after October 15 <sup>th</sup> for the Fall semester, January 31 <sup>st</sup> for the Winter semester and June 15 <sup>th</sup> for the Summer semester.	\$200.00 per occurrence for full-time students \$100.00 per occurrence for part-time students
<b>Supplemental Privilege</b> Students who write supplemental examinations at an outside centre may be required to pay an invigilator fee directly to that centre. Notification of non-payment will result in the withholding of grades.	\$50.00 per occurrence
<b>Note:</b> 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. <i>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.</i>	

## University Fees

### Tuition Fees

The undermentioned rates are those in effect until April 30, 2006. At the time of printing the 2006-2007 fee schedule had not been determined. The undermentioned 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 Visa Student Fees, in this section.

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

### Full-Time Fees - 2.00 credits or more

Program	Semester Fee
Bachelor of Applied Science	\$2,092.00
Bachelor of Arts	\$2,092.00
Bachelor of Arts and Science	\$2,092.00
Bachelor of Commerce	\$2,092.00
Bachelor of Computing	\$2,092.00
Bachelor of Landscape Architecture	\$2,272.00
Bachelor of Science	\$2,092.00
Bachelor of Science in Agriculture	\$2,092.00
Bachelor of Science in Engineering	\$2,272.00
Bachelor of Science in Environmental Sciences	\$2,092.00
Bachelor of Science in Technology	\$2,092.00
Doctor of Veterinary Medicine	\$2,272.00
General Studies	\$2,092.00

### Part-Time Fees - less than 2.00 credits

	Fee per 0.50 Credit
Tuition fee	\$418.00
Central Student Association fee	\$5.57
Student Service fee	\$8.55
University Centre fee	\$2.34
Women's Resource Centre	\$0.50
	Fee per Semester
Aboriginal Student Association	\$0.26
Affordable Housing	\$0.91
First Team Response	\$0.61
Food Bank	\$1.15
G.S.A.P.	\$3.20
Guelphbooks.com/Thecannon.ca	\$1.07

Guelph Students for Environment Change	\$0.15
Munford Centre	\$0.25
OUTLine	\$0.40
Part-time athletic fee	\$35.49
Part-time athletic building fee	\$16.00
Science for Peace	\$0.12
Student Health Service fee	\$9.68
Student bus pass	\$55.19
W.U.S.C.	\$0.82
Annual Fee	
Medical Insurance Premium	\$100.00
Dental Plan	\$112.00
Sign Club (Fall semester only)	\$0.26

### Audit Fees

Registration fee per audited course	\$260.00
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### Visa Student Fees

The tuition fee for students from outside of Canada who have obtained a student authorization and visa is as shown below:

Program	Full-time Semester Fee	Part-time Fee (per 0.50 credit)
B.A., B.A.S., B.A.SC., B.COMM., B.COMP., B.SC., B.SC. (AGR.), B.SC. (ENV.), B.SC. (TECH.), General Studies	\$4,865.00	\$974.50
B.L.A., B.SC. (ENG.)	\$6,994.00	\$1,399.00
D.V.M.	\$22,551.50	\$4,510.30

### 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. The 2005-2006 fees are:

	Visa Per Year	Visa/Exchange Per Semester
Single coverage	\$528.00	\$176.00
Two-person coverage	\$1,056.00	\$352.00
Family coverage	\$1,584.00	\$528.00

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 visa student fees, must present acceptable official documentation to Undergraduate Program Services, Office of Registrarial Services. To effect 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 visa student fee are synopsized as follows:

- 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.
- refugees (officially recognized).
- members of foreign military forces admitted to Canada under the Visiting Forces Act, and their dependents.

The descriptions above are brief statements synopsized 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

	Fee per Semester
Academic Semesters (maximum of 8)	\$200.00
Work Semesters	\$200.00
Annual Fee	
Dental Plan Premium*	\$112.00

Medical Insurance Premium*	\$100.00
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**Note:** Students who withdraw or are required to withdraw from the co-op program after accepting their second work term offer of employment will be required to pay all remaining co-op fees.

### 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.

Foreign students attending the University of Guelph are required to pay the University Health Insurance premiums shown below (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 tuition, student organization and other fees, with the exception of material costs required for Fine Art and Distance Education courses.

### Summer Semester and Summer Session

For classification purposes, any combination of Summer Semester credits (13 week) and Summer Session credits (6 week) that total 2.00 credits or more will constitute **full-time** enrolment and tuition and other university fees will be charged accordingly.

### Other University Fees

These fees are applicable to students registered in 2.00 or more credits. They are compulsory and non refundable.

Athletic building fee	\$32.00
Athletic fee	\$77.33
Student health service fee	\$22.08
University centre fee*	\$11.75
Student support service fee	\$42.76
<b>Total other university fees</b>	<b>\$185.92</b>

\*The University Centre Fee is payable at \$11.75 per semester to a total of \$23.50 for each 12 month period commencing with the Summer Semester. Part-time students are charged \$2.34 per 0.50 credit.

### Student Organization Fees

Applicable to students registered in 2.00 credits or more. These fees, determined by programs, are collected as a service to the student government to support student organizations, distributed as follows:

Affordable Housing	\$0.91
Aboriginal Student Association	\$0.26
Canadian Federation of Students	\$3.66
Carousel	\$0.50
Entertainment Media fee	\$5.11
First Response Team	\$0.61
Food Bank	\$1.15
G.S.A.P.	\$3.20
Guelph Queer Equality	\$0.22
Guelphbooks.com/Thecannon.ca	\$1.07
Guelph Students for Environment Change	\$0.15
G-OPIRG	\$5.60
International Student Organization	\$1.01
Munford Centre	\$0.25
O.C.U.S.	\$0.50
Ontario Federation of Students	\$3.05
Ontarion	\$2.48
OUTLine	\$0.40
Peak Newspaper	\$1.29
Radio Gryphon	\$6.10
Science for Peace	\$0.12

Sign Club (Fall semester only)	\$0.26
Student Bus Pass	\$55.19
University of Guelph Central Student Association	\$13.49
Volunteer Connections	\$1.33
Women's Resource Centre	\$2.64
W.U.S.C.	\$0.82

In addition, the Dental Plan annual premium of \$112.00 and the Medical Insurance Premium of \$100.00 provide coverage for the duration of the semester, whether or not the student withdraws from the University. Married students wishing to have their spouse and/or children insured and students who marry during the semester must apply within 30 days of registration or marriage respectively. See the Central Student Association, UC Level 2 (Room 274). Please refer to your C.S.A. or G.S.A handbook for more details with respect to your student Health Plan.

### Colleges Semester Fee

Arts	\$8.00
Biological Science	\$8.50
Physical Science	\$8.00
Physical Science (Engineering)	\$12.00
Ontario Agricultural College	\$10.00
Ontario Veterinary College	\$10.00
Social and Applied Human Sciences	\$6.00

## 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 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 Faculty Advisors, who focus on subject-related issues and advice, and a Program Counsellor, who assists with degree program requirements and expectations.

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 students 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:

### Students

#### Responsibilities of the Student

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 Section I of the Undergraduate Calendar.

The responsibilities of 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
- to contact the program counsellor or faculty advisor for clarification of regulations and procedures

### Faculty Advisors

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/students\\_faculty.shtml](http://www.uoguelph.ca/uaic/students_faculty.shtml).

#### 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
- to refer to other campus services, as necessary
- to 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
- to 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
- to assist students wishing to change or add specializations

- to approve the declaration of the specialization to the student's degree program and to sign specialization approval
- to assist the student to make academic decisions
- to refer students to the program counsellors, as appropriate
- to offer advice about meeting the requirements of the Schedule of Study for the specialization
- to be reasonably available to meet with students, as requested
- to assist with graduation checks, as requested
- to approve substitutions or exemptions for the specialization
- to be aware of career and graduate study opportunities related to the field of study, or refer appropriately
- to assist with course selection issues related to the specialization
- to provide information to the department, curriculum committee, program committee, and program counsellor about issues or concerns concerning the Schedule of Studies for the specialization
- to 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/students\\_counsellors.shtml](http://www.uoguelph.ca/uaic/students_counsellors.shtml).

#### 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
- to refer to other campus services, as necessary
- to 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
- to 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
- to assist the student to make academic decisions and understand the implications of those decisions
- to assist with course selection and enrolment management issues as related to the degree program
- to explain transfer procedures and requirements
- to explain appeal procedures
- to assist with graduation checks
- to sign program approval, as appropriate
- to change student type, as appropriate
- to meet with students as requested, or required
- to refer to the faculty advisor, as appropriate
- to uphold the academic policies of the university
- to help interpret the academic policies and procedures to students, staff, and faculty
- to act as a source of referral to other campus services
- to be generally aware of career and graduate study opportunities related to the field of study, or refer appropriately
- to work closely with the faculty advisor on any changes to the Schedule of Studies
- to consult, as necessary, with other campus services
- to provide relevant information to the faculty advisors, departments, dean, curriculum and program committees (and sub-committees) about student issues with the degree program
- to participate at liaison events, as requested

### The Undergraduate Academic Information Centre

The role of the Undergraduate Academic Information Centre (UAIC) , (U.C. Level 3, extension 56613, [uaic@uoguelph.ca](mailto: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 program issues. Centre staff 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 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 about changing or adding a specialization, or transfer to a different degree program will 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.

## **The 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 Registrarial Services, Coordinator of Undergraduate Curriculum, deans, chairs, Student Affairs, Office of Open Learning/ 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.

## **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 one of the Associate Registrars (Office of Registrarial Services, Level 3, University Centre), their Program Counsellor, or the Undergraduate Academic Information Centre.

## **Non-Academic Counselling**

Students are advised to consult the Student Life sub-section in Section 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 (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 faculty advisor for that specialization prior to obtaining the signature of the program counsellor for the degree program.

## VIII. Undergraduate Degree Regulations and Procedures

### General Information

The academic regulations outlined in VIII--Undergraduate Degree Regulations and

### Academic Consideration, Appeals and Petitions

#### Process for Academic Consideration and Appeals

Time of Semester	Type of Consideration	Consideration Granted By	Period of Consideration	Subsequent Appeal To
<b>During the Semester (up to course grade submission deadline)</b>	Medical Psychological Compassionate	Instructor	Same semester	Academic Review Sub-Committee Submitted as soon as possible, not later than the end of the following semester
<b>End of Semester (following course grade submission deadline)</b>	Medical Psychological Compassionate	Academic Review Sub-Committee (consult with program counsellor)	Should be submitted as soon as possible	Petitions Committee 90 day deadline for appeals of academic review decisions
<b>After the Semester</b>	<b>Grade Reassessment:</b>			
	Calculation Error or omission	Instructor	10 class days of the following semester	No appeal
	Methods and Criteria	Department Chair	10 class days of the following semester	Petitions Committee 10 days after decision of chair
	Misapplication of an Academic Regulation	Instructor	Should be initiated as soon as possible	First Level: Department Chair Second Level: College Dean Third Level: Provost
	<b>Academic Consideration:</b>			
	Course Results: Compassionate Medical Psychological	Academic Review Sub-Committee (consult with program counsellor)	No deadline, but a request should be submitted during or immediately after the semester	Petitions Committee 90 day deadline for appeals of academic review decisions
	Request for Probationary Status	Academic Review Sub-Committee (consult with program counsellor)	Should be submitted by the first deadline of the next semester	Petitions Committee 90 day deadline for appeals of academic review decisions

#### General Information for Academic Consideration and Appeals

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.

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.

#### Academic Consideration

The University will consider granting consideration for courses if there are sufficient extenuating medical, psychological or compassionate circumstances. Academic Consideration may take the form of an extended deadline, a deferred privilege, a late drop of a course(s) with or without failure, withdrawal from a semester with or without academic failure, or permission to continue on probationary status. A deferred privilege could take the form of approval to write a missed final examination or the completion of a course requirement after the end of the semester. Academic consideration is granted when acceptable medical, psychological or compassionate circumstances affect any portion of the semester work. Generally, work commitments will not constitute grounds for academic consideration. Depending upon the circumstances and whether the semester work is complete, consideration may be granted by the instructor, the program counsellor or the Academic Review Sub-Committee of the program in which the student is registered.

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 program counsellor is the student's advisor in all matters pertaining to academic consideration and can assist in defining an appropriate course of action (counsellor names

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, director, chair of program committee, or the program counsellor in a particular degree program.

and locations can be found in Section VII--Academic Counselling). **It is the student's responsibility to consult 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. 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 present the medical documentation to the program counsellor.

##### 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. 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. 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 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 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 90 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 Undergraduate Program Services, Office of Registrarial Services or the program counsellor. Deadlines for Academic Review Sub-Committee meetings can be found in Section III--Schedule of 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 "Instructor's Recommendation" form recommending that the student be granted one of:

1. a passing grade
2. credit standing
3. a deferred privilege
4. a grade reflective of work completed to date

1, 2, or 3 will only be granted by the Academic Review Sub-Committee if the medical evidence or compassionate reasons have been verified and accepted. 4 will be granted if the medical or compassionate circumstances presented are inadequate or insufficiently documented. The instructor should include with the Instructor's Recommendation 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 are normally required to be completed early in the following semester, refer to Section III--Schedule of Dates. The Schedules Section, 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 Undergraduate Program Services, Office of Registrarial Services, by the end of the add period for the following semester.

### Co-operative Education Appeal Process

The Co-operative Education program requires that a student achieve an overall average of 70 percent during first year in order to continue in the program. An appeal option is available to students who are removed from co-op for not meeting the requirement. The appeal must be taken to the Program Counsellor who will then take it to the Academic Review Committee for consideration.

### Petitions

The Senate Committee on Student Petitions is comprised of students, faculty and a representative of the Office of Registrarial Services. It is responsible for assessing and disposing of cases submitted to it by any undergraduate or graduate student of the University. The Senate Committee on Student Petitions will consider petitions and conduct hearings on requests which fall under one of the following:

1. Appeals of decisions of Academic Review Sub-Committees involving medical, psychological or compassionate grounds. Petitions has the same options for consideration available to it as the Academic Review Sub-Committee (see Academic Consideration).
2. Appeals of academic misconduct decisions.
3. Petitions concerning the methods and criteria used by an instructor in assigning a grade. The Committee does not consider appeals for grade reassessment unless the request concerns the methods and criteria used by the instructor.
4. Appeals of an Admissions Committee decision regarding readmission to a program. The Committee will consider appeals concerning readmission provided the appeal is on the grounds of procedural unfairness or bias on the part of the Admissions Committee.

### Petitions Concerning a Course Grade(s) Involving Medical, Psychological or Compassionate Grounds

A student may appeal any decision of the Academic Review Sub-Committee to Petitions. The appeal must be submitted to the Office of the Judicial Officer within 90 days of receiving notification of the decision. Requests submitted after this deadline will not normally be considered.

Students should speak to the Judicial Officer before submitting a petition to ensure proper completion of the form.

The Committee will not normally consider a petition concerning an illness or incident that occurred at some time in the past unless there is a reasonable explanation for the delay in submitting the petition.

### Petitions Concerning Methods and Criteria Used by an Instructor in Assigning a Course Grade

Before submitting such a petition the student must have submitted a written appeal to the chair of the department of the instructor assigning the course grade and have received

from the chair of the department a written statement that every effort has been made at the department level to resolve the issue. The student must provide the Judicial Officer with a clear and concise statement of the allegations.

## Academic Accommodation of Religious Obligations

The University acknowledges the pluralistic nature of the graduate and undergraduate communities and that 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 of the Human Rights and Equity Office to facilitate a resolution.

For a current list of major holy days, please check the following website <http://www.uoguelph.ca/hre/hr/hrholydays.shtml> or contact the Human Rights and Equity Office.

## Academic Load

### Full-time

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

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 policies on Misconduct in Research and Scholarship and the Student Rights and Responsibilities regulations. These policies will be strictly enforced.

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 Misconduct in Research and Scholarship, the Student Rights and Responsibilities regulations, 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<sup>1</sup>.

## 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.

<sup>1</sup> 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, [www.uoguelph.ca/research/policies/index.shtml](http://www.uoguelph.ca/research/policies/index.shtml), 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.

### 3. Improper Access

It is an offence to improperly obtain through theft, bribery, collusion, or otherwise access to confidential information, examinations or test questions or to gain undue academic advantage as a result of such behaviour.

### 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 at [http://www.uoguelph.ca/undergrad\\_calendar/c08/c08-amisconduct.shtml](http://www.uoguelph.ca/undergrad_calendar/c08/c08-amisconduct.shtml), 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 once 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.

## Procedures

### A. Notes Re: Procedures and Authority to Act

- Deans may delegate their authority under this policy to an appropriate designate(s). Such delegation may be full (for example, all cases are delegated to an Associate Dean), or partial (for example, authority with respect to offences related to course work may be delegated to departmental chairs). Deans must provide the University's Judicial Officer with the name(s) of individual(s) to whom authority has been delegated under this policy.
- For offences related to course work (including examinations):
  - The designate or the Director of Open Learning will carry out the role of the chair in cases where the offence has been committed in an Open Learning, non-degree credit course. Degree credit courses offered through distance are within the authority of the chair of the department offering the course. The role of the dean in the case of non-degree credit courses offered through the Open Learning program is carried out by the Director of Open Learning.
  - For undergraduate students and open learners, the relevant dean is the dean of the college in which the course is offered, and the dean of the college in which the student is enrolled (if different) should receive a copy of the decision. In the event that an offence is committed in a degree credit course by an open learner, the Director of Open Learning should receive a copy of the decision.
  - For graduate students, the relevant deans are the dean of the college in which the course is offered and the Dean of Graduate Studies acting jointly. The dean of the college in which the student is enrolled (if different) should receive a copy of the decision.
- For offences not related to courses, or for course offences involving students not enrolled in the course, for undergraduate students the dean of the college in which the student is enrolled is responsible for administering the policy. For graduate students, the policy is administered jointly by the Dean of Graduate Studies and the dean of the college in which the student is enrolled.
- In the event that a chair/director has a conflict of interest in dealing with a case, the dean will appoint another faculty member to deal with the case. In the event that a dean's designate has a conflict of interest in dealing with a case, the dean may appoint an alternate designate or choose to deal with the case himself/herself. In the case of a conflict of interest on the part of a dean, the Provost will appoint a designate to deal with the case.
- Wherever in this policy it states that a student is to be contacted, the normal expectation is that such contact will be made using the student's University of Guelph email account, with a copy of any correspondence being sent to the home address provided to the University by the student.

### B. Detection and Documentation

#### 1. Examinations

The responsibility for preventing and 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. The student is required to contact the instructor no later than the end of the examination period.

#### 2. Term assignments, including research and thesis work

The initial responsibility for detecting academic misconduct on term assignments, etc., necessarily lies with the person(s) responsible for evaluation and discussion of the student's work, although that person may make use of reports from others to assist in detection, and may make use of electronic means of detection appropriate to the discipline. Where academic misconduct is suspected, the evaluator/marker shall retain possession of any suspect material and give a full report in writing together with any confiscated material to the instructor-in-charge of the course, or to the student's advisor, if the instructor/advisor is not the evaluator/marker. At this stage, the student will be informed by the instructor/advisor that a suspicion of academic misconduct is being investigated.

#### 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.

### C. Investigation and Judgment

#### 1. Offences Related to Course Work, Research, Thesis Work or Examinations

- 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.
- 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 Undergraduate Program Services/Graduate Program Services by the chair.
- 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.
- Normally within ten working days of receipt of the case from the chair, 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.
- If after weighing the available evidence the dean finds an offence has been committed, the dean will contact Undergraduate Program Services/Graduate Program Services as appropriate to determine whether this is a first offence.
- 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).
- 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, she/he may seek an extension of time from the Provost.

Should the dean determine that an academic offence has not been committed he/she shall so inform the student, the instructor/advisor and the chair in writing. A copy of the letter will be forwarded to Undergraduate Program Services/Graduate Program Services as appropriate. Thereafter, the complaint shall have no official status as an accusation of academic misconduct and no record of the complaint shall be maintained on the student's record.<sup>2</sup>

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 Undergraduate Program Services/Graduate Program Services (as appropriate).

- h. 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.
- i. 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.

<sup>2</sup> 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 Undergraduate Program Services/Graduate Program Services (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 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.
- c. If after weighing the available evidence the dean finds that an offence has been committed, the dean will contact Undergraduate Program Services/Graduate Program Services 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. (h) 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 Undergraduate Program Services/Graduate Program Services (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.

## Appeals

1. Students may appeal either the finding, the penalty, or both to the Senate Student Petitions Committee.
2. Appeals must be submitted to the Senate Student Petitions Committee within 15 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 Regulations 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

Undergraduate Program Services, or the Dean of Graduate Studies, or the Director of Open Learning 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 Undergraduate Program Services/Graduate Program Services 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.

*Note: Template letters to students, forms for Undergraduate Program Services and Graduate Program Services, and suggested wording for course outlines are available on the following site: <http://www.uoguelph.ca/senate/policies.shtml>.*

## 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 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), she/he 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

Offences	First Offence	Subsequent Offences
<b>A. Misappropriation of Other's Work</b>		
1. Plagiarism		
Minor	Resubmission of new work <b>Loss of grades<sup>3</sup></b> Zero on the assignment	Loss of grades <b>Zero on the assignment</b> Zero in the course Loss of scholarship/bursary Suspension

Major	<b>Zero in the course</b> Loss of scholarship/bursary Suspension	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation
2. Copying		
Minor	Resubmission of new work <b>Loss of grades</b> Zero on the assignment	Loss of grades <b>Zero on the assignment</b> Zero in the course Loss of scholarship/bursary Suspension
Major	<b>Zero in the course</b> Loss of scholarship/bursary Suspension	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation
3. Unauthorized Collaboration		
Minor	Resubmission of work <b>Loss of grades</b> Zero on the assignment	Loss of grades <b>Zero on the assignment</b> Zero in the course Loss of scholarship/bursary Suspension
Major	<b>Zero in the course</b> Loss of scholarship/bursary Suspension	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation
<b>B. Misrepresentation and Fraud</b>		
1. Impersonation		
Minor	<b>Zero on the assignment</b> Zero in the course Loss of scholarship/bursary Suspension	<b>Zero in the course</b> Loss of scholarship/bursary Suspension
Major	Zero in the course Loss of scholarship/bursary <b>Suspension</b>	Zero in the course Loss of scholarship/bursary Suspension <b>Expulsion/Revocation</b>
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.	Resubmission of work Loss of grades Zero on the assignment <b>Zero in the course<sup>4</sup></b> Loss of scholarship/bursary Suspension/revocation of admission offer	Zero in the course Loss of scholarship/bursary <b>Suspension/revocation of admission offer</b> Expulsion/Revocation
3. Withholding of documents		
Minor	<b>Official warning</b> Loss of grades Resubmission of work Zero on the assignment	<b>Zero in the course<sup>5</sup></b> Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation of degree or admission offer
Major	Zero in the course Loss of scholarship/bursary Suspension <b>Expulsion/Revocation of degree or admission offer</b>	Zero in the course Loss of scholarship/bursary Suspension <b>Expulsion/Revocation of degree or admission offer</b>
4. Unauthorized Aids		
	Resubmission of work Loss of grades <b>Zero on the assignment/exam</b>	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation
<b>C. Improper Access and Obstruction<sup>6</sup></b>		
1. Preventing Access		
Minor	<b>Official warning</b> Resubmission of work Loss of grades Zero on the assignment	<b>Zero in the course</b> Loss of scholarship/bursary Suspension

Major	<b>Zero in the course</b> Loss of scholarship/bursary Suspension	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation
2. Obstruction and Interference	Loss of grades Zero on the assignment Zero in the course Loss of scholarship/bursary <b>Suspension</b>	Zero in the course Loss of scholarship/bursary Suspension <b>Expulsion/Revocation</b>
3. Improper Access	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation	Zero in the course Loss of scholarship/bursary Suspension <b>Expulsion/Revocation</b>
4. Improper Dissemination	Zero in the course (if applicable) <b>Suspension</b>	Zero in the course Loss of scholarship/bursary <b>Suspension</b> Expulsion/Revocation

<sup>3</sup> Bolded text indicates the normal expectation for penalty for a first or second year undergraduate, or first year graduate student.

<sup>4</sup> If the falsified document is course-related (e.g. medical note).

<sup>5</sup> If the withheld information would have affected admission to a course.

<sup>6</sup> These offences may also be subject to penalty under the Student Rights and Responsibilities Policy.

## Academic Review Sub-Committee Procedures

The Academic Review Sub-Committee of each program committee meets three times each semester as follows:

- after the third day of the add period.
- after the twentieth class day.
- after the last day of exams.

Refer to Section III--Schedule of Dates, for the submission deadlines for each of these meetings.

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. If a student is appealing a required to withdraw decision, the student should submit the "Request for Academic Consideration" form by the first deadline of the next semester.

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 Undergraduate Program Services, Office of Registrarial Services, or the 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.

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 or to Undergraduate Program Services, Office of Registrarial Services.

The Associate Registrar, Undergraduate Program Services, or designate, shall prepare the agenda for each meeting of the Academic Review Sub-Committee, maintain a record of the sub-committee's decisions and immediately 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 90 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 allowed to continue in his/her program if granted **probationary** status (see Continuation of Study in this section).

## Required to Withdraw

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 Section 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.

## Notes on Academic Structure

### Senate

Under the University of Guelph Act the Senate is the ultimate academic authority in the University. Senate directs the academic life of the University assisted by its boards and committees which report regularly to Senate. Senate Bylaws, composition and membership are available on the Senate website at: <http://www.uoguelph.ca/senate/>. The meetings of Senate are open to visitors who have tickets. Tickets are available from the Secretary of Senate, 4th Floor, University Centre.

### Board of Undergraduate Studies

The Board of Undergraduate Studies, which meets regularly from the beginning of September to the end of June, controls all undergraduate degree programs under the authority of Senate. Information about the Board, including the terms of reference, bylaws, and membership, is available under the Boards & Committees link on the Senate website at: <http://www.uoguelph.ca/senate/>.

### Program Committee

For each undergraduate degree program there is a program committee which consists of faculty representatives, student members, staff from the Office of Registrarial Services, and a program counsellor. Committees examine the general regulations relating to their program and also the particular regulations proposed for specializations within that program. Admissions policy is recommended by these committees to the Board of Undergraduate Studies and is approved by Senate. Each program committee has an Academic Review Sub-Committee which reviews grades as reported to the Registrar and determines the academic standing of each student in the program. More information about the roles and responsibilities of program committees may be found on the Board of Undergraduate Studies link, off of the Boards & Committees link on the Senate website at: <http://www.uoguelph.ca/senate/>.

### Senate Committee on Student Petitions

The Senate Committee on Student Petitions assesses and disposes of academic appeals from students registered at the University of Guelph. The members of the committee are appointed annually by Senate on the recommendation of the Senate Committee on Bylaws and Membership. More information on the Senate Committee on Student Petitions may be found on the Senate website, under the Boards & Committees link, at: <http://www.uoguelph.ca/senate/>.

## Adding Courses

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.

## 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 completed by the instructor. The student must then present the completed form along with a completed Course Request form to Undergraduate Program Services for processing. Waiver forms are available from Undergraduate Program Services, Office of Registrarial Services, Level 3, University Centre. <https://webadvisor.uoguelph.ca/st/index.shtml>.

## Distance Education Courses

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

## Program Approval

Program 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.

**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.

## 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 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 Undergraduate Program 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 Section VI--Schedule of Fees).

Application deadline dates are published in Section 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 fulfil the objectives of a degree or diploma program. Associated Program Requirements, when valid, are identified in Section 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 Section 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.

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 courses plus the number of courses in progress. As courses are dropped and added, or grades are received, the class level must be adjusted accordingly. Class Level is determined as follows:

Successfully Completed Credits and Credits In-progress	Class Level
0.00 - 2.50	1
2.75 - 5.00	2
5.25 - 7.50	3
7.75 -10.00	4
10.25 - 12.50	5
12.75 - 15.00	6
15.25 - 17.50	7
17.75 - 20.00	8
20.25 - 22.50	9
22.75 (or more)	10

## 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 4 is outlined in the Degree Programs section of this calendar (Section X--Doctor of Veterinary Medicine) and is only applicable to students registered in the Doctor of Veterinary Medicine program.

Schedule 1

Schedule 2

### Schedule 1

Students will follow Schedule 1 if:

1. they have registered for the first time at the University of Guelph with no previous registration in another college or university; or
2. they are registered at Guelph in the Open Learning Program and taking credit courses; or
3. they have been registered in a program at this University, are eligible to continue study in that program and subsequently transfer to another degree program (including students transferring from Open Learning to a degree program); or
4. they have transferred from another university or college and have been admitted to semester 1 at this University; or
5. they have been required for any reason other than academic performance to withdraw from the program, and subsequently are accepted for readmission to that program; or
6. they have registered at the University of Guelph as an exchange student.

### 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%.

Conditions for continuation of study are applied using the following tables:

#### 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

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

Cumulative Average (C) Semester Average (S)	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

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

Cumulative Average (C) Semester Average (S)	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 rises above 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

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

Cumulative Average (C) Semester Average (S)	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

Students are advised of their course section when they receive their individual course schedule (WebAdvisor) at the beginning of the semester. Course section information 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

Undergraduate Program 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 Section VII--Academic Counselling. 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

In-Course Students

### 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 return their course selection prior to the published deadline date have an opportunity to make their selection during the extended 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 may receive the course

selection material by contacting Undergraduate Program Services, Office of Registrarial Services, prior to the deadline date for submission of course selection requests (refer to Section III--Schedule of Dates). Course selection requests received after the deadline date will not be processed.

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.**

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 at the start of the semester (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.

**A copy of a student's Academic Evaluation will be available after the second week of classes in a semester to each registered student. 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 Section VII--Academic Counselling)
3. Submit the request using WebAdvisor. If a student is required to submit a form to Undergraduate Program 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 Office of Open Learning. <http://www.open.uoguelph.ca/>

To change your specialization, please use the "Undergraduate Schedule of Studies Change Request" form and submit it to Undergraduate Program 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 Requisite/Restriction Waiver" form, showing instructor approval, is presented to Undergraduate Program Services along with the "Undergraduate Course Request" form. **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 enrolled in the D.V.M. program are not normally sent an "Undergraduate Course Request" form. However, where changes to the required schedule of studies are necessary, students must indicate the course changes on an individual basis with their program counsellor and submit the change to Undergraduate Program Services, Office of Registrarial Services.

**Students not currently registered must contact Undergraduate Program Services prior to the deadline dates if course selection is to be possible. Students missing the deadline dates will have to add their courses during the add period.**

### Departmental Advisor's Responsibilities

All advisors should be familiar with any course restrictions that apply to courses in their department.

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 Section 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 Section 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 "Undergraduate Course Request" forms.

To produce course counts based on the course selection material received 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, Undergraduate Program 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.

## 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 are normally completed in the semester immediately following the semester in which the course was taken.**

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 Undergraduate Program Services, Office of Registrarial Services within 10 days of the release of the grades. 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 "Instructor's Recommendation" form any special circumstances relating either to the student or to the way the course was conducted (see Final Grades).**

Undergraduate Program Services records the results of deferred privileges, and re-evaluates the student's academic record for continuation of study. If continuation of study requirements have not been met the Academic Review Sub-Committee will revise the student's academic standing.

Deferred Condition

Deferred Examination

Procedures

### Deferred Condition

The instructor and/or the department determines 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://webadvisor.uoguelph.ca/st/index.shtml> and a copy of the form is retained by the instructor and the student. The department notifies the Schedules Section 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. The Schedules Section, Office of Registrarial Services, advises students in writing of the deadline for the completion of a condition. In addition, the Schedules Section directs the student to the "Terms of Supplemental/Deferred Condition" form <https://webadvisor.uoguelph.ca/st/index.shtml>. It is the student's responsibility to contact the instructor and make arrangements for the details of the condition.

The Schedules Section advises departments in writing 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 Undergraduate Program Services. It is the responsibility of the department to advise the appropriate instructors of the deferred conditions that have been granted.

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 "Instructor's Recommendation" form. Students may be considered for an extension, or the assignment of a grade based on incomplete work, if medical 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 to Undergraduate Program Services, Office of Registrarial Services.

### Deferred Examination

The Schedules Section, Office of Registrarial Services, schedules and supervises deferred examinations that are two hours in length. The Schedules Section 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 (refer to Section III--Schedule of Dates).

Students may request an extension, or the assignment of a grade based on incomplete work, if medical or compassionate reasons prevail at the time of the scheduled examination. In this case, the student must submit a Request for Academic Consideration with documentation to Undergraduate Program Services, Office of Registrarial Services. When a deferred examination is scheduled, the department must send one paper for each student granted a deferred examination in the course, plus one extra paper for the course to the Schedules Section, Office of Registrarial Services.

### Procedures

### Department Chair's Responsibilities

To request a deferred examination from the individual instructor upon request from the Schedules Section, Office of Registrarial Services and to inform instructors of students who have been granted deferred conditions.

To forward the examination papers to the Schedules Section by the date indicated in the request letter.

To distribute the completed examination booklets to the appropriate instructor for marking.

In the case where the student is unable to make contact with the instructor to determine the nature of a deferred condition, take necessary steps to assist the student in determining the requirements for the condition.

To initial all grades submitted by instructors and forward them to the Examinations Clerk, Scheduling Section, Office of Registrarial Services, by the date indicated in the request letter.

### Instructor's Responsibilities

In the case of a deferred condition, the instructor is to complete the "Terms of Supplemental/Deferred Condition" form, provide the student with a copy and keep a copy. The instructor must adhere to the deadlines for the completion of the condition and the submission of the final grades to the Schedules Section, Office of Registrarial Services.

### Registrar's Responsibilities

Undergraduate Program Services informs the student and the Schedules Section of the academic review decisions and evaluates the continuation of study status when the deferred grades have been recorded.

The Schedules Section informs the department 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; requests the deferred examination papers from the chair of the department; invigilates the deferred examinations; forwards the completed examination papers to the chair of the department; and collects the final grades.

### Student's Responsibilities

When the Academic Review Sub-Committee grants a deferred condition, it is the student's responsibility to contact the instructor and present the "Terms of Supplemental/Deferred Condition" form upon notification. The student must contact the instructor immediately in order to be able to complete the condition prior to the deadline specified by the Schedules Section, Office of Registrarial Services. The deadline is normally the last day of the deferred examination period for that semester. The student should have the instructor complete the form stating the exact nature of the deferred condition. If the student cannot contact the instructor, he/she must contact the chair of the department offering the course. If the student does not make the required contact within the deadline specified by the Schedules Section, the University will assume that the student does not intend to complete the condition, and cancel the deferred privilege.

When a deferred examination is granted, it is the student's responsibility to appear for the deferred examination on the date and time designated on the deferred examination timetable.

## Dropping Courses

All course drops from a student's program for a particular semester are to be completed by the dates specified in the Schedule of Dates (refer to Section III). Courses that are one semester long must be dropped by the end of the fortieth class day; two-semester courses must be dropped by the last day of the add period in the second semester. The dropping of a course after the deadline is allowed only in exceptional circumstances and requires the approval of the program counsellor or Academic Review Sub-Committee of the program in which the student is registered.

### 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 Section VI--Schedule of Fees for the refund schedule).

The deadline dates for dropping courses (i.e. the fortieth class day) are noted in Section 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 Section VI--Schedule of Fees for refund schedule. Normally, changes to the effective date of dropped courses are only allowed for documented medical or compassionate reasons and require the approval of the program counsellor.

### Regular Courses

Regular courses may be dropped from the start of the add period to the fortieth class day 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 the add period 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 Section 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 the program counsellor 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 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 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.

**All rooms for mid-term examinations are to be booked through the Reservations Clerk, Schedules Section, Undergraduate Program Services.**

### Department Chair's Responsibilities

Department chairs shall:

- be responsible for the conduct of all term examinations.
- appoint an adequate number of invigilators to assist the instructor-in charge.

### Instructor's Responsibilities

Faculty members:

- are urged to exercise discretion when requiring certification of illness and, in particular, 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.
- shall take an attendance record at each term examination. The attendance record is for the department's use and is not submitted to Registrarial Services.

## 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 given 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 ORS whether a final examination time slot is required for a course. Departments will indicate whether:
  - a. the examination will be a regular, sit-down examination for which a room is required;
  - b. the examination will be a take-home examination; or
  - c. the examination will be in some other format (orals; computer exams; juried performance exams, etc.).

Unless approved by the Department Chair, examinations for 1000 level courses will be in regular, sit-down format only.

2. 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.
3. The final examination period consists of eleven days, except in the Summer semester, where it is eight days.
4. 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.)
5. 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.

6. 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.

7. 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. Such a request must be initiated by the student 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.

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.

8. 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.

### Student's Responsibilities

1. Students who drop and add courses are required to consult the examination timetable in order to avoid conflicts in examination times. Written approval must be obtained from the dean or director and the instructor-in-charge of the course to register in courses that have conflicting examination times.
2. **ACADEMIC CONSIDERATION IS NOT GIVEN TO STUDENTS WHO MISREAD PUBLISHED TIMETABLES.**
3. Students must consult the "Final Examination Seating Plan", which is posted in various locations throughout the University and available on the web via WebAdvisor one week prior to the commencement of final examinations, for seating locations.
4. 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.
5. No person shall be allowed in the examination hall during the course of examination except the candidates concerned and those supervising the examination.
6. 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.
7. 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 card will be signed at the time of collection.
8. 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 the co-ordinator in the Athletic Centre.

9. No smoking shall be allowed in the examination hall.
10. 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.
11. No writing within the answer book 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.
12. Candidates shall not communicate with one another by writing, by signs, by words, or in any manner whatsoever while examinations are proceeding.

### Department Chair's Responsibilities

1. Responsible for the security of the examinations printed in the department for the instructor.
2. Printing the required number of copies for each examination.
3. Responsible for distributing the copies of the examination to the instructor on the date set for the examination.
4. Distributing a copy of the "Final Examination Seating Plan" to each instructor concerned. The timetable is sent from the Office of Registrarial Services in course number sequence approximately one week prior to the final examinations.
5. Responsible for the conduct of all examinations held in their department by their faculty. They shall be responsible for appointing invigilators. The instructor-in-charge of the examination shall be the faculty member responsible for the course and the setting of the examination or a designate.
6. To distribute the examination attendance records provided by the Office of Registrarial Services.
7. To appoint invigilators for examinations under the direction of the Office of Registrarial 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).
8. Completing the examination information sheets by the requested deadline dates, and informing the Schedules Section, Office of Registrarial Services, regarding any requests for changes.

### Instructor's Responsibilities

1. The faculty member responsible for the course and the setting of the examination, or a designate, shall be the instructor-in-charge for that course.
2. If it becomes necessary to change an examination time or to add a final examination, the instructor-in-charge of the course is required to contact the Schedules Section, Office of Registrarial Services, and once a time is set, obtain the written approval of all students.
3. To advise the Schedules Section, Office of Registrarial Services, prior to the examination if an "open book" examination is to be written; otherwise, it will be considered "closed book".
4. To be present at the examination room thirty minutes prior to commencement of the examination and to be responsible for distribution of examination papers, attendance cards, if used, and other authorized materials.
5. To be responsible for the taking of attendance during the first hour of the examination period. (Attendance cards are used in the Athletic Centre and class lists in other locations.)
6. To be responsible for arranging the pick-up of examination books and 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. To ensure all examination books are securely packaged.
8. The instructor-in-charge and his/her invigilators shall not allow any student to enter the examination room after the first 60 minutes nor allow any student to leave during the first 60 or last 15 minutes of the examination period.
9. Include 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.**
10. Where a student does not write the final examination, the instructor shall follow the procedures outlined under Academic Consideration in this section of the calendar.
11. Instructors who wish to hold examinations in other than sit-down, regular formats should discuss procedures with their department chairs.

### Registrar's Responsibilities

1. A "Departmental Final Examination" form is distributed by the Schedules Section, Office of Registrarial Services, to all department chairs approximately six weeks prior to the semester to which it applies.

- The Final Examination Timetable is computer prepared and is based on student course selections made during the course selection period. The Final Examination Timetable is available to the students at least 2 days prior to the start of classes.
- Approximately 6 weeks prior to the start of final examinations, a Final Examination Seating Plan Information Sheet is distributed by the Schedules Section, Office of Registrarial Services, to the department chair. The department chair is asked to have the form completed by the deadline date in order that a seating plan can be arranged. **It is most important that all information sheets be returned by the deadline date.**
- Under normal circumstances, changes to the published examination timetable are not allowed.
- To provide each instructor-in-charge with an examination attendance record in the form of a print-out of all students registered in the course or attendance cards for those examinations being written in the Athletic Centre.
- Examinations held in the Athletic Centre shall be under the direction of the Office of Registrarial Services or designate who shall be the co-ordinator responsible for the conduct of examinations during the final examination period.
- The co-ordinator will start and end the examination.
- The co-ordinator shall assist the instructor-in-charge to ensure that no student enters the examination room after the first 60 minutes or leaves during the first 60 minutes or the last 15 minutes of the examination period.
- The Office of Registrarial Services shall prepare a set of guidelines for the instructor-in-charge and invigilators which will assist them in carrying out their duties in the examination rooms.
- Students in distance education courses who live further than 170 km from campus will write their final examination at a selected off-campus examination site close to where they live. For further information please contact the Office of Open Learning at (519) 767-5000.

### Policy on Student Access to Final Examination Materials

Final examination papers and final assignments are to be retained by faculty members for a period of one semester.

Printed or written materials directly related to examinations conducted in the final examination time period published in the Undergraduate Calendar, or related to final assignments shall be made available to a student, upon submission of a written request to the department chair. The request shall be submitted by the fifth class day of the next semester.

Printed or written materials to be made available include the examination question paper, the marking scheme keyed to desired responses to questions, where appropriate; the student's response to the examination questions; and records taken by examiners during oral or any other examination. Faculty members are encouraged to discuss openly with the student any questions raised. The department chair will make the necessary arrangements for student access to the material. When a large number of requests are received in connection with a specific course or when a faculty member is on leave it may be necessary for the department chair to delay access and make special arrangements, e.g., the posting of the marking scheme on a bulletin board, the scheduling of a special meeting at which the faculty member will review the examination, etc.

### Exchange Programs

Exchange programs between the University of Guelph and other institutions are defined by the terms of formal exchange agreements. A copy of each agreement must be approved by the Associate Vice-President (Academic) and registered with the Associate Registrar, Undergraduate Program Services.

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 year. 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 Undergraduate Program Services, Office of Registrarial Services. Details on specific exchange programs can be found in Section 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 Section 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. 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. 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. 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. The student must submit a Request For Academic Consideration form to request a supplemental privilege.

The Academic Review Sub-Committees will consider granting a supplemental privilege in the following special circumstances:

- 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);
- the failed course is not available to the student within the following three semesters, or within a time period that includes the graduating semester;
- 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
- 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 "F" 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:

A+	90-100%	C	63-66
A	85-89	C-	60-62
A-	80-84	D+	57-59
B+	77-79	D	53-56
B	73-76	D-	50-52
B-	70-72	F	0-49
C+	67-69		

Courses taken on exchange are graded using the Outstanding /Pass /Fail alternate grading system (refer to Exchanges, Section V--Special Study Opportunities; Exchanges). In addition, selected University of Guelph courses, approved by the Board of Undergraduate Studies, will use this alternate grading system.

#### Alternate Grading System

OP	Outstanding (Pass)
P	Pass
F	Fail

#### Other Grade Notations

AUD	Audit
CRD	Credit
DEF	Deferred Privilege
INC	Incomplete
INP	In Progress
MNR	Mark Not Received
WF	Withdrawn with Failure
XXF	Supplemental Privilege Failed (XX denotes the original failing grade)

XXP	Supplemental Privilege Passed (XX denotes the original failing grade)
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## 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. Particularly in 1000 and 2000 level courses, instructors are urged to provide some feedback prior to the 40th class day.

### 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 go beyond the given 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.

### 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 that is 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.

Department also refers to schools and to colleges (where multiple section courses are offered by, or coordinated by the Office of a College Dean).

### 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

Undergraduate Program 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 Undergraduate Program 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 Undergraduate Program 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 Undergraduate Program 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 "Instructor's Recommendation" form.**

### Instructor's Recommendation 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 "Instructor's Recommendation" form for the student.** The "Instructor's Recommendation" form is available from the chair of the department. Departments must submit the "Instructor's Recommendation" form(s) along with the "Grade Report" form to Undergraduate Program 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 instructor's recommendations assist 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 (refer to Academic Consideration and Appeals).

### 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 Undergraduate Program Services, Office of Registrarial Services.

### Registrar's Responsibilities

Undergraduate Program Services records the examination results; notifies students of their grades via WebAdvisor; notifies program counsellors of incomplete grades; and records deferred privilege decisions (refer to Deferred Privileges).

### 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 Undergraduate Program 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.

Students who are required to withdraw will be notified at their mailing address.

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 (see Academic Consideration, Appeals and Petitions)

- change the student's continuation of study status
- improve the student's program or specialization average
- submit late grades (see Final 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 succeeding 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 Undergraduate Program 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

The course outline distributed to the class at the beginning of the semester defines the methods and criteria used in establishing final grades for a course. The methods and criteria must conform to the grading procedures established by Senate and be continually reviewed by the department (see Final Grades).

Students who believe that the methods or criteria used by an instructor in determining a final grade have been unfair, unreasonable or inconsistent with the course outline, should request the chair of the department offering the course to review the methods or criteria used. They should submit the request in writing by the 10th day of the subsequent semester and should state the reasons for the request.

The chair shall make an effort to resolve the matter to the satisfaction of both parties as soon as possible. Both the instructor and the chair are free to discuss the student's work with the student or another instructor in the department, but are not obliged to do so.

If both parties are able to come to an agreement, the chair shall prepare a statement of the agreement to be signed by both parties. If the agreement results in a change to the grade of the student, the chair shall inform Undergraduate Program Services, Office of Registrarial Services.

If at any time the chair decides that he/she cannot resolve the matter informally, he/she will terminate all efforts at reconciliation and notify both the student and the instructor of this decision. The chair will advise the student to make an appeal to the Senate Committee on Student Petitions. The student must appeal to the committee within 10 days of being advised of the termination of the chair's efforts.

### Misapplication of an Academic Regulation or Procedure

Academic regulations and procedures pertaining to grades can be found in the subsection of the "Grades" section entitled "Grading Procedures". Students who believe that the misapplication of an academic regulation or procedure has affected their final grade in a course should discuss their concern with the instructor. If the concern is not resolved to their satisfaction they may submit a complaint in writing to the chair of the department offering the course.

If the chair has reason to believe that the instructor has not adhered to the grading procedures established by Senate (see Final Grades) or other academic regulations of Senate, the chair should consult with the faculty member and, if necessary, the college dean. Ultimately, the Provost and Vice President (Academic) may have to take the necessary action to ensure compliance with the academic regulations of Senate.

## 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.

Undergraduate courses taken while registered in the Faculty of Graduate Studies cannot be used toward a baccalaureate degree program.

## Graduation

### A. Baccalaureate Programs

A student normally must be registered as a degree student in the program for the degree being awarded. However, a student registered in an honours program may apply to graduate from a general program in the same degree or a different degree, provided that all of the conditions for graduation for that degree have been satisfied using the calendar that is in effect at the time of application. A student with a non-degree program type is not considered for graduation; however, the student should check with his/her program counsellor for information.

Up to 50% of the requirements for a degree-credit certificate can be applied towards a degree program specialization in order to hold both a degree with a specialization and a specialized certificate.

## 1. Program and Calendar Requirements

The conditions for graduation are regulated by the degree programs. Program specific conditions for graduation are outlined in Section X--Undergraduate Degree Programs. Students must satisfy the schedule of studies requirements for the calendar ([http://www.uoguelph.ca/undergrad\\_calendar/](http://www.uoguelph.ca/undergrad_calendar/)) in effect at the time of their last admission to the program or at the time of any subsequent change in majors or areas of concentration. Where students select minors or areas of emphasis, the calendar used to determine the schedule of studies is the same as the calendar used for the major. Changes in minors or areas of emphasis do not necessarily affect the calendar used to determine the schedule of studies. Students may declare a schedule of studies from an alternate calendar if program approval is obtained.

Students who are on suspension for academic misconduct will not be permitted to graduate during the period of the suspension.

## 2. Academic Residence Requirements

- i. At least 5.00 of the credits required for graduation by the student's program must be taken at the University of Guelph.
- ii. 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.

## 3. 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 honours program by the completion of an additional specialization to qualify for the Honours Equivalent recognition. These students must be readmitted to an honours equivalent program. All previous University of Guelph credits are eligible for consideration toward the equivalent degree from the honours 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 at the time of admission into the honours equivalent program. Normally, all degree program regulations will apply to the Honours Equivalent specialization.

The students who are granted the Honours Equivalent designation do not participate in a convocation program, but have the designation shown on their transcript and may receive a new degree parchment upon application, subject to surrender of the original degree parchment and payment of the appropriate fee. Note, parchment replacement applies to Guelph graduates only.

## 4. Second Degrees

Students from the University of Guelph or from another university may graduate with a second undergraduate degree from the University of Guelph. If they have graduated with their first degree, they must apply for admission to the program for their second degree. However, only 10.00 credits may be transferred from the initial degree program. The course content of the second degree program must be substantially different from that of the first. If University of Guelph students apply to graduate with two different degrees at the same convocation, only 10.00 credits may be transferred from the registered program to the undeclared program. Note: A second degree is judged to be substantially different if:

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

## B. Certificate and Diploma Programs

To be granted a Certificate or Diploma, the conditions outlined in Section 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 transcript.

## C. Procedures

### Graduation Fee

A degree and graduation fee is assessed to students at the time of application for graduation. Students who apply for more than one degree are assessed a graduation fee for each degree awarded at convocation. The fee in effect at the time of the application is the amount assessed.

### 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. Formal convocation ceremonies, however, are held only in 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 Section III--Schedule of Dates. Late applications will be accepted with the submission of a late fee (refer to Section 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 e-mail 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 Section 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 Section XI of the calendar for one of the certificate or diploma programs, should submit an "Application for Completion of Certificate or Diploma" form available from the Convocation Clerk, Undergraduate Program Services, Office of Registrarial Services.

### Application for Graduation from Degree Programs

An e-mail inviting students to apply to graduate via Web-Advisor for students (My Application for Graduation) will be sent to each student registered in a general degree program when his/her completed plus inprogress credits equal 15.00 credits or more; and to students registered in an honours degree program when their completed plus inprogress 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 Convocation Clerk, Undergraduate Program 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 Provost and Vice-President Academic. If an applicant fails to satisfy any requirement(s), Registrarial Services will inform the student of that decision.

### Registrar's Responsibilities

Undergraduate Program Services, Office of Registrarial Services initiates an "Application for Graduation" process for the appropriate group of regular and special students.

Undergraduate Program 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.

Undergraduate Program Services forwards Academic Evaluation and check sheets to department chairs to obtain decisions on eligibility of the applicants. Undergraduate Program Services informs students not approved by the departments of the rejection and the reasons for it.

The Registrar will present a list of all recommended graduands to the Provost and Vice-President (Academic) for approval.

### D. Standing on Graduation

Standing on graduation is noted only for graduates from the honours programs 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.

### E. Notation on Transcript

Official transcripts from the University of Guelph will not show that a degree has been conferred until after the convocation.

## Letters of Confirmation of Enrolment

A student who requires a letter confirming attendance at the University in a given semester should make this request to Undergraduate Program Services, Office of Registrarial Services.

## Letters of Confirmation of Graduation

A student who requires a letter confirming graduation from the University should make this request to the Convocation Clerk, Undergraduate Program 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, available from the program counsellor, and obtain the appropriate approvals as indicated on the request form, prior to applying for admission to the other institution.

Credit for successful completion of such courses will be granted at the University of Guelph if a letter of permission has been presented to the Office of Registrarial 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 Undergraduate Program 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 "Letter of Permission" during the semester(s) specified on the "Letter of Permission". If the student registers in additional semesters or courses that are not approved by the University of Guelph, the student must apply for readmission.

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 approvals from the University of Guelph.

All courses for which letters of permission have been granted, will be included in all internal academic records, but not in the official transcript of the University of Guelph. These courses will not count as course attempts under the continuation of study regulations. Courses taken on a Letter of Permission will not count in the semester average or the overall academic 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 Co-ordinator of Undergraduate Curriculum 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 Undergraduate Program 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, Undergraduate Program 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 Undergraduate Program 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 Section 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 Section III--Schedule of Dates). An application fee is payable at the time the application is submitted (see Section 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 (one full-year course) provided they meet the criteria for readmission and the criteria for the transfer of credit.
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.

- 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, be it distance or on-campus, taken in open learning programs from either our university or at another university.

## 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.

### In-Course Students

All in-course students must complete the registration procedures prior to the deadline dates as published in Section 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 Undergraduate Program 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 procedure is as follows:

- Approximately 2-3 weeks before the deadline, a billing statement is on WebAdvisor, to students who have selected courses.
- 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 Section III--Schedule of Dates, of this calendar. 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 Undergraduate Program 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 Section VI--Schedule of Fees with their total payment submission. Students who comply with this procedure will receive their parking decals 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 you have paid and wish to cancel your registration before classes begin please call Undergraduate Program Services, Office of Registrarial Services and a full refund will be arranged. Students are advised that there is a withdrawal procedure as of the first day of classes (see Withdrawal).

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.

### Hospitality Services, OSAP, Parking

Each of these departments have information which will be distributed to students for the semester in question under separate cover, e.g. location for picking up meal cards, location to pick up OSAP grant/loan cheques, procedure to use for payment of parking decals.

### Return Mail Box Locations (Internal Mail)

The University has on-campus mail boxes which may be used to return registration payments. All mail is picked up daily and is post-marked by Mail Services.

### 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 Section 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 Undergraduate Program Services, Office of Registrarial Services within 10 class days of the commencement of classes. Appeal forms are available from Undergraduate Program 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, Undergraduate Program Services, and specific procedures for late registration will be arranged.

## 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 Section VII--Academic Counselling).

## Scheduling

### Undergraduate Course Timetable

The scheduling of all undergraduate courses is the responsibility of the Assistant Registrar, Scheduling.

The scheduling cycle for each S, F and W semester commences one year in advance. The final timetable for each semester is published on WebAdvisor two weeks prior to the commencement of the initial Course Selection period for that semester.

### Chair's Responsibilities

The Chair/Director or the designated Department Timetable Coordinator is responsible for the following:

- Submitting to the Assistant Registrar, Scheduling, no later than the established deadline, complete requests for courses to be scheduled in the subsequent academic year.
- Acting as liaison between instructors and Scheduling on all aspects of scheduling, including collecting information relevant to course scheduling from instructors, submitting it appropriately.
- Approving the department's course schedule before publication. This involves checking that no conflicts exist in instructor or student schedules.
- Calculating projected enrolments for the subsequent academic year and monitoring enrolments through course selection periods, making adjustments to course capacities and the availability of sections as necessary.

### Instructor's Responsibilities

Instructors are responsible for communicating to the Chair/Director or Department Timetable Coordinator, prior to the established deadline, any information relevant to the scheduling of courses in the subsequent academic year.

## Registrar's Responsibilities

The Assistant Registrar, Scheduling uses the following criteria when creating the course timetable:

- No course conflicts exist in core courses as published in the schedule of studies in the Undergraduate Calendar.
- The number of elective courses available to students is optimized.
- Classroom space is allocated to courses on the basis of projected enrolments.
- No instructor conflicts exist according to department information.
- Departmental requirements, requested by the Chair/Director or Department Timetable Coordinator, are met where possible.

## Changes to the Published Undergraduate Course Timetable

### Additional Hours/Sections

If it becomes necessary to schedule additional sections by adding lectures/labs/seminars based on course selection numbers, the request is to be initiated by the Chair/Director or Department Timetable Coordinator and made to the Assistant Registrar, Scheduling.

### Cancellations and Time Changes

If course cancellation or class meeting time changes are required once the course timetable has been published on WebAdvisor, the Chair/Director is responsible for obtaining the approval of the Associate Vice-President (Academic) through the Coordinator of the Undergraduate Curriculum (CUC), and the appropriate Dean. Requests to the CUC should be made by the Chair/Director in writing via electronic mail, copying the Dean and the Assistant Registrar, Scheduling. If approved, the CUC will notify the Dean and the Assistant Registrar, Scheduling. 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 electronic mail 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 following the procedure above.
- **Time changes after the commencement of classes.** Changes in scheduled meeting times 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. The academic unit should keep a record of student approval on file, and a request for the time change and new room assignment should be submitted by the Chair/Director or Department Timetable Coordinator to the Scheduling Coordinator. The instructor is responsible for ensuring that all registered students can attend during the new meeting time(s) and for informing the students of the new time(s) and room assignment(s).

### Classroom Assignment Changes/Bookings

- **Classroom changes prior to the commencement of classes\*.** At the request of the Chair/Director or Department Timetable Coordinator, the Assistant Registrar, Scheduling and Scheduling Coordinators may reassign classroom space based on course selection figures. Scheduling will make notification of changes affecting other academic units to the Department Timetable Coordinator for those units.
- **Classroom Changes and Bookings after the commencement of classes\*.** Instructors requiring classroom changes after the commencement of classes should forward their request through their Chair/Director or Department Timetable Coordinator to the Scheduling Reservations Clerk, via electronic mail. If classroom space assigned to a course is no longer required, instructors should also notify Scheduling by this means, as soon as possible. If rooms are required only occasionally for classes, they should not be held for full semesters, rather one-time or temporary bookings should be made through the Scheduling Reservations Clerk.
- Classroom bookings for non-regularly scheduled classes, meetings, conferences, tests, etc. may be made through the Scheduling Reservations Clerk, by University of Guelph faculty, staff and students.

\* To ensure that highest priority needs are met first and to reduce confusion on campus at the beginning of each semester, Scheduling will accommodate requests for classroom changes in the week preceding the commencement of classes and the first two weeks of classes based on the reasons below only. Requests made for other reasons will be neither accepted nor accommodated during this three-week period.

1. enrollment changes
2. student/instructor disability
3. exceptional circumstances which may be submitted by the Chair/Director to the Scheduling Reservations Clerk for approval by the Assistant Registrar, Scheduling.

## Staff Registration and Tuition Waiver

Those staff who are eligible for tuition waiver must complete a "Staff Registration and Tuition Waiver Request" form and submit it to Human Resources.

**It is essential that staff follow the normal procedures for contacting Undergraduate Program Services, Office of Registrarial Services, Level 3, University Centre, regarding their selection of courses.**

If the "Staff Registration and Tuition Waiver Request" form is not submitted and approved by Human Resources you will not be officially registered for the term.

In addition to completing the "Staff Registration and Tuition Waiver Request" form, you also must add your courses using WebAdvisor or submit an "Undergraduate Course Request" form outlining the course(s) you wish to take. The "Undergraduate Course Request" form can be submitted during the official course selection periods or during the "Add" process at the beginning of each semester.

## Student Type

Each full-time or part-time student is registered as one of the following:

### Regular

A student with student type "Regular" is registered in the regular course requirement for a program.

### Special

A student with student type "Special" is admitted to a program and is required to complete course or program deficiencies necessary to proceed under the "Regular" student category.

Note: It is the Program Counsellor's responsibility to change a student from "Special" to "Regular" student type.

## Supplemental Privilege Procedures

A student must apply to the Academic Review Sub-Committee for a supplemental privilege no later than the fifth day of classes of the semester following the failure (see Failed Courses in this section). In considering the request, the Academic Review Sub-Committee will consult with the course instructor to obtain information on the student's performance during the course, the instructor's recommendation concerning the appropriateness and feasibility of a supplemental privilege, and the nature of the supplemental privilege. If the Academic Review Sub-Committee approves the request, the department (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.

**Note:** Students in the B.Sc.(Eng.) Program should refer to the B.Sc.(Eng.) Program regulations under Conditions for Continuation of Study in Section 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 Section X.

### Student's Responsibilities

The student must request a supplemental privilege by submitting the request to the Academic Review Sub-Committee and the fee for the privilege (refer to Section VI--Schedule of Fees) no later than the fifth class day. Students are encouraged to submit their request before classes begin to allow for receipt of a decision within the add period. The granting of the request is normally limited to the described special circumstances having due regard for the student's performance in the course. Course requirements and the student's previous performance may play a significant role in determining whether a privilege is appropriate and/or feasible.

In the case of an examination supervised by the Office of Registrarial Services, it is the student's responsibility to appear on the correct date and time as designated by the Office of Registrarial Services.

If the requirement is beyond an examination supervised by the Office of Registrarial Services, the student must contact the instructor within 5 days of notification in order to clarify the details of the condition. Students are advised to have the instructor complete a form indicating the exact nature and due dates of the supplemental requirements, which may also include the satisfactory completion of an examination supervised by the Office of Registrarial Services (refer to Section III--Schedule of Dates). If the student is unable to make contact with the instructor, the chair of the department offering the course must be contacted. If the required contact is not made the University will assume that the student does not intend to complete the requirements, and the supplemental privilege will be cancelled.

### Academic Review Sub-Committee's Responsibilities

The Academic Review Sub-Committee, upon receiving a request from the student, and after consulting with the instructor and reviewing the student's course performance, will determine whether a supplemental privilege should be granted. When a supplemental privilege has been requested, but not granted, Undergraduate Program Services, Office of Registrarial Services, will inform both the student and the instructor. Similarly, when a supplemental privilege has been requested and granted, Undergraduate Program Services will advise the student and the instructor of the decision.

### Instructor's Responsibilities

**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 Registrarial Services. Upon request from the Academic Review Sub-Committee, the instructor will provide the**

**performance record of the student for the course, make a recommendation as to the appropriateness and feasibility of a supplemental privilege, and indicate clearly the conditions that would be necessary to ensure that the requirements for the course are fulfilled (see also reference to examinations, immediately below).**

If the Academic Review Sub-Committee grants consideration, and upon request from the student, the instructor will complete a form advising the student of the exact nature and due dates of the requirements for the supplemental privilege. If the requirement includes, or takes the form of, the satisfactory completion of a two-hour examination supervised by the Schedules Section, the instructor will have indicated this on the recommendation to the Academic Review Sub-Committee, and by the Wednesday of the third week of classes shall send to the Schedules Section, Office of Registrarial Services an examination for each student granted such a privilege, plus one extra copy per course. If the exam is significantly different from another two hour exam already completed by the student, the instructor must make this clear on the 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 needs to be communicated directly to the student at the time the supplemental privilege is granted.

Within ten days of completion of the supplemental privilege requirements, the instructor will forward to the Department Chair an indication as to whether the student has passed or failed the supplemental privilege. The supplemental privilege should be completed by at least the thirtieth class day of the semester following the failure.

### Department Chair's Responsibilities

In the case where the Academic Review Sub-Committee or student is unable to make contact with the instructor to determine the details of the supplemental privilege, the chair should take the necessary steps to assist in determining the requirements for completing the supplemental privilege.

The department chair will initial all decisions submitted by instructors upon the completion of a supplemental privilege by individual students (i.e. pass or fail). These decisions will be forwarded to Undergraduate Program Services, Office of Registrarial Services, by the thirty-sixth class day of the semester following the failure.

### Registrar's Responsibilities

The Schedules Section, Office of Registrarial Services will prepare an examination timetable for those students granted a privilege that includes, or takes the form of, a two-hour examination to be supervised by the Schedules Section. The Schedules Section will inform the student and instructor of the date, time, and location of any examination to be supervised by them. Examinations supervised by the Schedules Section as part of the supplemental privilege process are normally scheduled during the deferred examination period (refer to Section III--Schedule of Dates). The Schedules Section is also responsible for invigilating these examinations and forwarding the examinations to the instructor for evaluation.

Undergraduate Program Services, Office of Registrarial Services, will inform students of the results of the completion of the supplemental privilege and update the student's record where appropriate.

## Transcripts

An official transcript may be ordered by submitting the "Request for Transcript" form along with payment to Undergraduate Program Services, Office of Registrarial Services. The order can be placed by mail, by facsimile or in person:

Mail (cheque or money order): Undergraduate Transcripts, Undergraduate Program Services, U.C. Level 3, University of Guelph, Guelph ON N1G 2W1

Facsimile (credit card number with expiry date): 1-519-763-6809 Attn. Undergraduate Transcripts

The transcript fee is listed in Section VI--Schedule of Fees. Students must have met all financial obligation to the University before official transcripts can be released for any purpose.

Transcripts are normally prepared within three to five working days, however, during busy periods (e.g. common application deadlines) preparation time may be as long as seven to ten days.

Official transcripts from the University of Guelph will show that a degree has been conferred **only after** the date of convocation.

**NOTE:** Graduate Program transcripts (e.g. Master of Science) must be ordered by submitting the "Request for Transcript" form along with payment to Graduate Program Services. The order can be placed by mail, facsimile or in person.

**NOTE:** Official Open Learning program transcripts must be ordered by submitting the "Request for Transcript" form along with payment to the Office of Open Learning. The order can be placed by mail, facsimile or in person.

## Transfer of Program

University of Guelph students wishing to transfer from one degree program to another (e.g. from B.Sc. to B.Sc. (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 departmental 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 Undergraduate Program 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 departmental 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 Notice

During the third week of classes Undergraduate Program Services, Office of Registrarial Services, will send to each student registered at the University a copy of his/her current academic evaluation that also is available through WebAdvisor. This will indicate the personal and program information that is currently on file in Undergraduate Program Services, Office of Registrarial Services. This report is to be used to advise students of their current status and to correct any errors in reported information. Corrections or amendments to that information may be made upon presentation of appropriate documentation to Undergraduate Program Services, Office of Registrarial Services as follows:

- Changes to specialization information or course information must be substantiated with your copy of either the class schedule or the "Undergraduate Change of Studies Request" form.
- Changes to personal information may require presentation of appropriate documentation.

**Note: Report missing or corrected items only.**

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

Students who complete the procedure for registration (selection of courses and payment of fees) and who subsequently decide not to attend that semester may cancel their registration by notifying Student Financial Services up to but not including the first class day. Student Financial Services will arrange for the appropriate refund of fees paid. For the Fall semester the required minimum registration deposit will automatically be forfeited. Please refer to "Refunds" in section VI - Schedule of Fees for specific details. Commencing with the first day of regular classes the formal withdrawal procedure from the University is required and outlined below.

A student intending to withdraw from the University must notify Undergraduate Program Services, Office of Registrarial Services in writing and complete the Notice of Withdrawal

procedure. Students contemplating withdrawal are urged to meet with their program counsellor to discuss the implications of withdrawal. A student receiving financial assistance through the Ontario Student Assistance Program is strongly advised also to contact Student Financial Services regarding the status of that award upon withdrawal.

The timing of the withdrawal and the reasons for it may have academic and financial implications. Up to the 40th class day, a student may withdraw without academic penalty. However, unless the withdrawal is for illness or compassionate grounds, students will be liable for fees payable in accordance with the refund schedule (see Section VI-Schedule of Fees regarding Refunds). Students seeking a refund on grounds of illness or compassionate circumstance must provide documented evidence related to the grounds to Undergraduate Program Services, Office of Registrarial Services, within thirty days of the withdrawal.

A student who withdraws from the University after the fortieth class day of the semester, other than for illness or compassionate reasons will be considered to have failed the courses for which the student is registered at the time of withdrawal. Students seeking academic consideration on grounds of illness or compassionate circumstance must appeal to the Academic Review Subcommittee for their program (see Academic Consideration in this chapter). Depending on the timing and circumstances students may be able to obtain a fee refund after the fortieth class day. Students should consult with Undergraduate Program Services or their program counsellor.

A student who withdraws from the University 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. Students who are studying on exchange programs, study abroad, or work terms are considered to be registered at the University (see Time Limitations in this chapter).

### **Required to Withdraw**

Students may be required to withdraw 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. 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, the required to withdraw status will apply immediately.

Students who are granted a deferred privilege (examination or condition) will have their Continuation of Study Status assessed once the deferred privilege is complete. At that time an assessment of required to withdraw could have an impact on the student's current registration.

#### **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 two 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 Petitions Committee, on medical, psychological, or compassionate grounds. Students are not permitted to attend classes until such time that the appeal is granted.

Students who are suspended from the university as a result of academic misconduct, may appeal to the Senate Petitions Committee 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 3 criteria must apply to Admission Services for readmission:

- a. were required to withdraw from their program for a period of 2 or more semesters;

- b. were suspended from the University for academic misconduct; or

- c. have not registered at the University of Guelph for 6 or more consecutive semesters

Readmission to a program at the University of Guelph is not automatic. Students should consult Section 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 without academic penalty after the termination of the official drop period for medical or psychological reasons must clear their re-entry in a subsequent semester through the dean of the college concerned. 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 the Counselling Unit of the Counselling and Student Resource Centre 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, be it distance or on-campus, taken in open learning programs from either this university or another university.

- 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 (one full-year course) provided they meet the criteria for readmission and the criteria for the transfer of credit.
- 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 University of Guelph attracts a community of outstanding scholars to its broad range of faculties and programs. The Committee on Awards, established by the Senate of the University, is responsible for the supervision of the administration of awards in the gift of the Senate. In addition, this Committee formulates policies regarding the effective use of funds designated for awards and establishes the terms and conditions attached to the awards. Each College has an Awards Committee, which is responsible for the awarding of scholarships and bursaries. In addition, there is a University Bursary Committee that is responsible for awarding bursaries. 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/departments. Students entering the 1st semester of their first undergraduate degree, should consult the "entrance" sections for a listing of awards that may apply to them. Students that are registered students at the University of Guelph should refer to the "in-course" sections for a listing of awards that may apply to them. Also refer to Section VIII--Undergraduate Degree Regulations and Procedures, Academic Misconduct, Penalties, for additional regulations regarding scholarships and bursaries.

**Eligibility:** To be eligible for *entrance* awards, you should be a Canadian citizen or permanent resident entering the 1st year of post-secondary studies for the *first time*. To be eligible for *in-course* awards, all registered students are eligible for most awards, unless otherwise stated in the eligibility clause of the award. A minimum of 70% average is required for all scholarships. *International Students:* Financial Assistance Programs are available for International Students, including Entrance Awards, Work-Study and In-course Bursaries. In addition, many of the University of Guelph's scholarships for upper-year students are available to enrolled international students and are based on high academic standing. 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.

**Awards:** Generic term used to refer to a type of award that is not a scholarship. These include bursaries and ACCESS awards.

**ACCESS Awards:** The University recently established an endowment fund through the generous contributions of over 6,000 donors which was matched by the provincial government's Ontario Student Opportunity Trust Fund (OSOTF) program. The income generated from this endowment 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 program. Students must complete a Need Assessment Form in order to be considered. Please contact the Student Financial Services office for further details. Ontario Government Mandated Terms for an OSOTF 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 has been demonstrated as determined by the University of Guelph Need Assessment procedures.

**Bursary:** An award provided to a student on the basis of financial need. 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:** Awarded 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:** These are awarded based 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.

**Payment of Awards for In-course Students:** Please note that Student Financial Services will apply all internal awards against outstanding balances on students' accounts unless prior arrangements have been made.

**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.*

**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

<b>Adelaide Hoodless Entrance Scholarships [E0133]</b>	
Established in memory of Adelaide Hoodless, by the estate of her daughter, Muriel I. Bostwick (MAC '31D). This award will be made in two equal installments of \$750. The second installment will be paid at the beginning of semester 2 provided the recipient obtains at least a 70% average in semester 1. Application not required.	
<i>Donor(s):</i>	<b>The estate of Muriel I. Bostwick</b>
<i>Qualification(s):</i>	Students entering the BASc program.
<i>Amount:</i>	5 awards of \$1,500
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Clara E. Elliott Education Scholarship [E0210]</b>	
Provided by the estate of Clara E. Elliott, MAC '07. This scholarship is payable in 4 annual installments of \$2,000. To maintain the award for the second year of study, the recipients must have at least a 77% average and continue to demonstrate the qualities on which the award was given. To maintain the scholarship into the 3rd and 4th years, the recipient must have at least an 80% average in the prior year and continue to demonstrate the qualities on which the award was given. Students accepted into the BASc program will be invited to submit an application. One award of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Clara E. Elliott Estate</b>
<i>Qualification(s):</i>	Academically outstanding students, who are entering semester 1 of the BASc program with at least an 80% average and who plan to pursue a career in teaching. The recipients will be selected on the basis of academic achievement and evidence of participation in leadership roles, especially teaching and education. References from teachers and overall presentation of their application material will also be used to determine award recipients. Preference will be given to students planning a teaching career in areas related to family studies including nutrition education and early childhood education.
<i>Amount:</i>	1 award of \$8,000

<b>Clara E. Elliott Entrance Scholarships [E0095]</b>	
Provided by the estate of Clara E. Elliott, MAC '07. This scholarship is payable in 4 annual installments of \$2,000. To maintain the award for the second year of study, the recipients must have at least a 77% average and continue to demonstrate the qualities on which the award was given. To maintain the scholarship into the 3rd and 4th years, the recipient must have at least an 80% average in the prior year and continue to demonstrate the qualities on which the award was given. Eligible students admitted to semester 1 will be invited to submit an application. One award of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Clara E. Elliott Estate</b>
<i>Qualification(s):</i>	Students entering semester 1 of the BASc program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program with at least an 80% entrance average. The recipient will be selected on the basis of academic achievement and evidence of participation in leadership roles as indicated by their application material and reference letters from teachers.
<i>Amount:</i>	1 award of \$8,000
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>L.A. Beattie &amp; J.C. Beattie Memorial Scholarship [E0026]</b>	
The estate of Jessie L. Beattie has established a scholarship in memory of Lillie Ann Beattie and Jeannie Cockburn Beattie. The scholarship is awarded alternately between the B.A.Sc. (odd-numbered years) and B.Comm. (even-numbered years) programs. Application not required.	
<i>Donor(s):</i>	<b>The estate of Jessie L. Beattie</b>
<i>Qualification(s):</i>	Student entering full-time studies in the B.A.Sc. program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors in the B.Comm. program who has achieved the highest mark in English during the final year of high school. In the event of a tie, preference will be given to students from rural areas.
<i>Amount:</i>	1 award of \$300

**Lincoln Alexander Chancellor's Scholarship [E0493]**

These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** Many Donors

**Qualification(s):** Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.

**Amount:** 2 awards of \$26,000

**Mac-FACS Alumni Association Centennial Scholarship [E0162]**

Established by the Mac-FACS Alumni Association. The winner will be selected from the pool of eligible students not awarded the Clara E. Elliott Education or Entrance Scholarships.

**Donor(s):** Mac-FACS Alumni Association

**Qualification(s):** This scholarship is offered to students entering the BASc program or the Marketing Management or Housing and Real Estate Management majors of the B.COMM. program with high academic standing and who have shown leadership in community-based volunteer activities. Students who have applied to the above programs will be invited to submit an application.

**Amount:** 1 award of \$500

**Mac-FACS Alumni Entrance Scholarship - FRAN [E0522]**

Established in 1960 by the Mac-FACS Alumni Association and awarded in the Fall semester. Application not required.

**Donor(s):** Mac-FACS Alumni Association

**Qualification(s):** Students entering the B.A.Sc program in the Department of Family Relations and Applied Nutrition. Selection will be based on the highest admission average. This award is not tenable with the President's Scholarship or the Lincoln Alexander Chancellor's Scholarship.

**Amount:** 1 award of \$1,000

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

**Amount:** 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

<b>University of Guelph Entrance Scholarships [E0291]</b>	
This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: <a href="http://www.uoguelph.ca/studfin/fall_current_merit.shtml">http://www.uoguelph.ca/studfin/fall_current_merit.shtml</a> . Application not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.
<i>Amount:</i>	Several awards ranging in value from \$1,500 to \$3,000
<b>University of Guelph Faculty Association Scholarship [E0292]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.
<i>Amount:</i>	1 award of \$2,250
<b>W. Penri Morris Memorial Scholarship [E0430]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Prof. Rosalina Morris</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

### Entrance Scholarships with Financial Need

<b>Bill Klopp Memorial Award [E0150]</b>	
Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).	
<i>Donor(s):</i>	<b>Ross and Mary Lou Klopp</b>
<i>Qualification(s):</i>	Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.
<i>Amount:</i>	1 award of \$500

<b>Kenneth O. Hammill-Blount Canada Scholarship [E4356]</b>	
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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.	
<i>Donor(s):</i>	<b>The Blount Foundation, Inc.</b>
<i>Qualification(s):</i>	Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$9,600, payable in 8 payments of \$1,200
<b>Registrar's Entrance Scholarships [E0384]</b>	
Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students entering a full-time undergraduate program on the basis of financial need and academic merit.
<i>Amount:</i>	500 awards of \$2,000
<b>Rol-Land Farms Scholarships [E4519]</b>	
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 (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 May 1. ACCESS AWARD	
<i>Donor(s):</i>	<b>Rol-Land Farms</b>
<i>Qualification(s):</i>	Outstanding entering undergraduate degree students 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).
<i>Amount:</i>	13 awards of \$2,000
<b>University of Guelph Accessibility Scholarship [E3038]</b>	
Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students entering a full-time undergraduate program on the basis of financial need and academic excellence.
<i>Amount:</i>	150 awards of \$9,000

## Entrance Awards with Financial Need

### Harvey Graham Bursary [E3030]

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

### 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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

### 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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

### Tammie Nevills Memorial Bursary [E3541]

The family and friends of the late Tammie 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 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 May 1. ACCESS AWARD

*Donor(s):* **The family and friends of Tammie Nevills (FACS'81)**

*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

## In-course Scholarships

### A.M. Bell Prize [C0028]

Provided by the estate of the late Adna M. Bell. Application not required.

*Donor(s):* **The Estate of Adna M. Bell**

*Qualification(s):* Student who obtains the highest grade in course NUTR\*4900 Selected Topics in Human Nutrition.

*Amount:* 1 award of \$150

### Adelaide Hoodless Memorial Scholarships [I0137]

Established in memory of Adelaide Hoodless, by her son, Bernard B. Hoodless. Students will be eligible for only one Adelaide Hoodless Memorial Scholarship. Apply by letter outlining extracurricular activities to the Department of Family Relations and Applied Nutrition, by April 1.

*Donor(s):* **The Estate of Bernard B. Hoodless**

*Qualification(s):* Students entering semester levels 5, 6, or 7 of the BASc program.

*Amount:* 2 awards of \$500

### Adelaide Hoodless Proficiency Scholarships [I0138]

In memory of Adelaide Hoodless, the estate of her daughter, Muriel L. Bostwick (MAC '31D), has established a number of proficiency scholarships to students in the BASc program. Students can receive up to two Adelaide Hoodless Proficiency Scholarships. Apply to the Department of Family Relations and Applied Nutrition by April 1.

*Donor(s):* **The Estate of Bernard B. Hoodless**

*Qualification(s):* Students entering semester levels 3, 4, 5, 6 or 7 of the BASc program with a cumulative average of at least 70%. Recipients will be selected on the basis of academic merit and involvement in extracurricular activities.

*Amount:* 2 awards of \$500

### Agincourt Milk Producers' Association Scholarship [I0003]

Application not required.

*Donor(s):* **Agincourt Milk Producers**

*Qualification(s):* Student preferably from a farm family in York County or the Region of Durham. The student must be entering semester 7 of the B.A.Sc. program with a good academic record and be majoring in Applied Human Nutrition. Presented in the Fall semester.

*Amount:* 1 award of \$600

### Ann E. Barber Memorial Scholarship [I0023]

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 CSAHS Undergraduate Awards Committee with a one-page description of contributions to student activities by April 1.

*Donor(s):* **Mac-FACS Alumni Association**

*Qualification(s):* Full-time student in the BASc program or the Marketing Management or Housing and Real Estate Management major of the B.COMM. program who has completed between 5.0 and 10.0 course credits and has achieved a minimum 80% average in the semester just completed. The award will be given to the student who has made the greatest contribution to student activities in residence or on campus.

*Amount:* 1 award of \$500

### Anne Callagan Memorial Scholarship [I0038]

The alumni, faculty and staff of the former College of Family and Consumer Studies established a scholarship in memory of Professor Anne Callagan. Offered in odd-numbered years. Application not required.

*Donor(s):* **The alumni, faculty and staff of the College of Social and Applied Human Sciences**

*Qualification(s):* Co-op student in the BASc program who achieves the highest cumulative grade average over the first 4 semesters of study.

*Amount:* 1 award of \$400

### Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.

*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

### Certified General Accountants Award for Excellence Prize [C0025]

Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.

*Donor(s):* **Certified General Accountants Association of Ontario**

*Qualification(s):* Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGEC\*2220; Management Accounting AGEC\*2230; and Intermediate Accounting AGEC\*3330.

*Amount:* 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

<b>CFRU Volunteer Award [I0215]</b>
Apply to the CFRU Board of Governors by April 30.
<i>Donor(s):</i> <b>Station Manager, CFRU</b>
<i>Qualification(s):</i> Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.
<i>Amount:</i> 2 awards of \$250
<b>Class 1930 Scholarship [I0061]</b>
A student may receive this scholarship once only. Application not required
<i>Donor(s):</i> <b>Students' Council of the Macdonald Institute</b>
<i>Qualification(s):</i> Student entering semester level 3, 4 or 5 who obtains highest standing in the BASc program
<i>Amount:</i> 1 award of \$200
<b>Class of 1970 Scholarship [I0424]</b>
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 not required.
<i>Donor(s):</i> <b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,400
<b>Class of Mac '65 Scholarship [I0579]</b>
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 Chair of the Department of Family Relations and Applied Nutrition by April 1, including a comprehensive listing of extracurricular involvement and leadership roles.
<i>Donor(s):</i> <b>Class of Mac '65</b>
<i>Qualification(s):</i> Canadian citizens or permanent residents who are majoring in Applied Human Nutrition or Gerontology in the BASc program and have completed a minimum of 12.5 course credits.
<i>Amount:</i> 1 award of \$1,000
<b>Collins Barrow Award [I0040]</b>
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.
<i>Donor(s):</i> <b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i> Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i> 1 award of \$500
<b>CSAHS Student Volunteer Scholarship [I0482]</b>
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. Applications are available from the CSAHS Dean's Office. Apply to the CSAHS Dean's Office with a completed application form, 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, and 2 letters of recommendation by April 1. This scholarship will be awarded to the Student Volunteer of the year to help defray the costs associated with volunteerism. One award of \$350 (an equal amount will be awarded to the charitable organization of the recipient's choice).
<i>Donor(s):</i> <b>Harshman Fellowship Society and Pfizer Canada Inc.</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$350
<b>David F. Boyes Apiculture Scholarship [I0031]</b>
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.
<i>Donor(s):</i> <b>The Apiculture Club</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$150

<b>Deans' Scholarships [I0323]</b>
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.
<i>Donor(s):</i> <b>Board of Governors</b>
<i>Qualification(s):</i> Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i> 150 awards of \$1,000
<b>Dorothy Britton Memorial Scholarship [I0015]</b>
Scholarships are awarded from funds donated from the estate of Dorothy Britton (MAC '39). Awarded on the basis of high academic achievement. Application not required.
<i>Donor(s):</i> <b>The Estate of Dorothy Britton</b>
<i>Qualification(s):</i> Students entering semesters 4 or 5 of the BASc program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program are eligible.
<i>Amount:</i> 6 awards of \$1,500
<b>Elizabeth Landels Casselman Scholarship [I0050]</b>
Awarded from the estate of Elizabeth Landels Casselman. Apply by April 1 to Department of Family Relations and Applied Nutrition, stating leadership qualities and participation in extracurricular activities.
<i>Donor(s):</i> <b>Elizabeth Landels Casselman Estate</b>
<i>Qualification(s):</i> Student entering the semester 5 of the BASc with a minimum cumulative average of 80% and demonstrated excellence and leadership in extracurricular activities.
<i>Amount:</i> 1 award of \$1,700
<b>Ellen Nilsen Memorial Award [I0047]</b>
Offered by the friends of Ellen Nilsen. Apply to the Director of the Collaborative International Development Studies Programme, Rm 702 MacKinnon Building, by October 7.
<i>Donor(s):</i> <b>The Friends of Ellen Nilsen</b>
<i>Qualification(s):</i> Academically outstanding woman from a developing country who is registered at the University of Guelph in an undergraduate or a graduate program and who has demonstrated a commitment to social change.
<i>Amount:</i> 1 award of \$1,500
<b>Ethel M. Christie Scholarship [I0057]</b>
Established by Dr. George I. Christie, former President of the Ontario Agricultural College, and his daughter, Margaret C. Hearn, in memory of Ethel M. Christie. Application not required.
<i>Donor(s):</i> <b>Dr. George I. Christie &amp; Margaret C. Hearn</b>
<i>Qualification(s):</i> Student in the BASc program who has achieved highest standing in 1.50 or more credits in English.
<i>Amount:</i> 1 award of \$100
<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.
<i>Donor(s):</i> <b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i> Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i> 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. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* Mrs. George A. Gray

*Qualification(s):* Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**Gerhard Scherf Memorial Scholarship [I0252]**

Established by the former College of Family and Consumer Studies Student Association Council (FACS SAC) in memory of Professor Scherf, a former faculty member in the Department of Marketing & Consumer Studies. Apply to the CSAHS Awards Committee by April 1 with a detailed list of extracurricular activities.

*Donor(s):* FACS Student Administrative Council

*Qualification(s):* Student who has successfully completed 10.00 credits in the BASc program or a major offered by the School of Hospitality and Tourism Management or the Department of Marketing & Consumer Studies. Applicants must have a minimum average of 70% in the last two full-time semesters and have made an outstanding contribution to the College of Social and Applied Human Sciences. Student must have served for at least one year on the board of directors of the CSAHS Student Alliance or participated in other College activities.

*Amount:* 1 award of \$200

**Gertrude R. Peterson Memorial Scholarship [I0234]**

Application not required.

*Donor(s):* Mr. Eugene Peterson

*Qualification(s):* Student in the Applied Human Nutrition major who obtains the highest mark in the course NUTR\*3040, Nutritional Aspects of Disease. In the case of a tie, the award will be given to the student with the highest cumulative average.

*Amount:* 1 award of \$500

**Gonder Family Centre for Students with Disabilities Volunteer Award [I0563]**

In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Centre for Students with Disabilities (CSD) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the CSD. The award will be made on the basis of the volunteer activities undertaken by the student at the CSD, 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 CSD (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 CSD.

*Amount:* 1 award of \$900

**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 CSAHS major of the B.Comm. program. Application not required.

*Donor(s):* Dr. John and Mrs. Katherine Gonder

*Qualification(s):* All students in the CSAHS 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 Centre for Students with Disabilities.

*Amount:* 1 award of \$900

**Governor General's Medal [C0044]**

Established by the Office of the Governor General of Canada. Application not required.

*Donor(s):* The Chancellor

*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:* 1 Silver medal

**H.H. Harshman Foundation Scholarships [I0123]**

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 April 1, demonstrating leadership.

*Donor(s):* The Harshman Foundation

*Qualification(s):* Full-time student in the B.A.Sc. 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.

*Amount:* 3 awards of \$3,000

**Helen G. West Memorial Scholarship [I0512]**

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 April 1st, including a comprehensive listing of leadership involvement in extracurricular activities.

*Donor(s):* Nancy Sawyer, Mary H. Simpson, their families and Belle Shirlaw

*Qualification(s):* A student in any major of the B.A.Sc. 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 \$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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

*Donor(s):* International Student Organization (ISO)

*Qualification(s):* Full-time International 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 75%, and is registered at the time of application.

*Amount:* 1 award of \$1,000

**Janet M. Wardlaw Medal [C0096]**

Application not required.

*Donor(s):* Faculty, staff, alumni and students, formerly FACS

*Qualification(s):* Presented to the Winegard Medal nominee selected from candidates from the Department of Marketing & Consumer Studies, the Department of Family Relations and Applied Human Nutrition and the School of Hospitality and Tourism Management.

*Amount:* 1 Medal

**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, and is administered by the Mac-FACS Alumni Association. Application not required.

*Donor(s):* Graduating Class of Mac '29

*Qualification(s):* Graduating student with the highest cumulative average in the Applied Human Nutrition major of the BASc program.

*Amount:* 1 award of \$300

**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 letter to the CSAHS Undergraduate Awards Committee, Dean's Office by April 1st, including a statement that outlines the student's experience working with the elderly in a volunteer capacity as well as extracurricular involvement the student may have and two letters of reference, one of which should be from someone who can speak to the student's volunteer experiences with the elderly, while the other should comment on the extracurricular activities of the student.

*Donor(s):* **Mr. Robert N. Carter and Family**

*Qualification(s):* Undergraduate student in the CSAHS who has completed at least 10.0 credits with a minimum 70% cumulative average and has made a significant contribution to the care of the elderly. Preference will be given to students in the BASc program majoring in Gerontology.

*Amount:* 1 award of \$1,000

**Joan (Ellerington) Tanner Memorial Scholarship [C0279]**

This endowment fund has been established by her family in memory of Mrs. Joan (Ellerington) Tanner, a 1957 graduate of the Macdonald Institute. Application not required.

*Donor(s):* **Professor J. Tanner**

*Qualification(s):* Student graduating in any given academic year with the highest academic standing in the last 4 semesters of the BASc program

*Amount:* 1 award of \$1,000

**John Eccles Scholarship [I0093]**

Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.

*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 \$600

**Katherine Fuller Scholarship [I0107]**

Established by Macdonald Institute Alumni in 1931 to honour Mrs. Katherine Fuller, the Superintendent of Macdonald Hall from 1904 until her retirement in 1931, and offered by the Mac-FACS Alumni Association. Application not required.

*Donor(s):* **Macdonald Institute Alumni Association**

*Qualification(s):* Full-time student in the BASc program or the Marketing Management or Housing and Real Estate Management major of the B.COMM. program, who has completed between 5.0 and 10.0 course credits and has demonstrated a high level of academic achievement.

*Amount:* 1 award of \$500

**Kenneth W. Hammond Award [I0045]**

The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.

*Donor(s):* **Kenneth W. Hammond**

*Qualification(s):* Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.

*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 the end of the 12th week of the Winter semester.

*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.

*Donor(s):* **Students, staff, faculty and friends of Dr. Leonard Conolly**

*Qualification(s):* Full-time visiting exchange undergraduate or graduate 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). 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.

*Amount:* 1 award of \$1,000

**Mac '69 Scholarship [I0082]**

Established in 1976, by the class of Mac '69, in memory of classmate Patricia Cosgrove. Apply to Department of Family Relations and Applied Nutrition by April 1.

*Donor(s):* **Class of Mac '69**

*Qualification(s):* Students who have completed their 2nd or 3rd semester of the BASc program by April. Preference will be given to students showing general proficiency in both curricular and extracurricular work.

*Amount:* 1 award of \$600

**Mac-FACS Alumni Association Scholarship - Family Relations and Applied Nutrition [I0524]**

Offered by the Mac-FACS Alumni Association. Awarded in the Fall semester. Application not required.

*Donor(s):* **Mac-FACS 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 the highest cumulative average above 80%.

*Amount:* 1 award of \$500

**Marie-Pier Lamoureux Memorial Scholarship [I0359]**

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. A student may only receive this scholarship once. Application not required.

*Donor(s):* **David Jones and friends**

*Qualification(s):* Full-time undergraduate student entering semester 5, 6 or 7, who is enrolled in the Applied Human Nutrition major in the BASc program. The scholarship will be awarded to the student with the highest cumulative academic standing.

*Amount:* 1 award of \$1,000

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

*Donor(s):* **TBA**

*Qualification(s):* The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

*Amount:* 3 awards of \$250

**May B. Stewart Scholarships [I0270]**

Established through the W.C. Macdonald Company of Montreal. Application not required.

*Donor(s):* **W.C. McDonald Company**

*Qualification(s):* Students with the highest cumulative average in the Child, Youth and Family and Gerontology majors entering semester level 5, 6, or 7. Students may receive only one May B. Stewart Scholarship.

*Amount:* 2 awards of \$200

**Morton and Pauline Schmidt Memorial Scholarship [I0429]**

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. Application not required.

*Donor(s):* **Eleanor E. Wein**

*Qualification(s):* Student in semester 5 or above of the Applied Human Nutrition major of the BASc program with at least a 70% cumulative average and who does not hold another major scholarship concurrently. If two students are equally qualified, the student showing the greatest improvement in semester average will receive the award.

*Amount:* 1 award of \$1,500

**Nelson Women's Institute Scholarship [I0587]**

This award will be provided to the student with the highest cumulative average above 75%. Preference will be given to a mature student. Application not required.

*Donor(s):* **Nelson Branch of the Halton District Federated Women's Institutes of Ontario**

*Qualification(s):* Students enrolled in any undergraduate program offered by the Department of Family Relations and Applied Nutrition.

*Amount:* 1 award of \$400

**Ontario Women's Institute Scholarship [I0160]**

Offered by the Federated Women's Institute of Ontario. Apply to Dean's Office, College of Social and Applied Human Sciences, by April 1.

*Donor(s):* **Federated Women's Institutes of Ontario**

*Qualification(s):* Students from Ontario with a minimum cumulative average of 70% who have completed 4.00 to 6.00 course credits in either the B.A.Sc. program or the Marketing Management or Housing and Real Estate Management major in the B.Comm program or any of the majors of the B.Comm. offered by the School of Hospitality and Tourism Management 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:* Several awards of \$500

**Ottawa-Carleton '83 International Ploughing Match (FRAN) Scholarship [I0340]**

Apply to Student Financial Services by April 1 with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining extracurricular activities.

*Donor(s):* **Ottawa-Carleton International Ploughing Match Committee 1983**

*Qualification(s):* Students from the Region of Ottawa-Carleton in the year they have completed semester 2 in the BASc program and who have a cumulative average of 70% (minimum) standing in semesters 1 and 2. Participation in extracurricular activities and financial need will be considered.

*Amount:* 2 awards 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

**Sister Mary Frederick Sheehan Award [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. Application 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 to a Dietetic Internship are eligible. The recipient will be the student with the highest academic standing.

*Amount:* 1 award of \$250

**Stephanie Wilken Volunteer Award [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 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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.

*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. 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, provided that a minimum of 70% standing is obtained.

*Amount:* 1 award of \$1,000

<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400
<b>Vera Ayres MacBeth Scholarship [I0159]</b>	
Mr. Bernard Ward has established this scholarship in memory of Mrs. Vera Ayres MacBeth, a 1923 graduate of the Macdonald Institute. Application not required.	
<i>Donor(s):</i>	<b>Mr. Bernard A. Ward</b>
<i>Qualification(s):</i>	Full-time student in the BASc program with high academic standing.
<i>Amount:</i>	1 award of \$400
<b>Virginia McEwen Memorial Scholarship [I0186]</b>	
An endowment has been established by the family and friends of Virginia McEwen, an alumna of Macdonald Institute, Class of '57 (B.H.S.C.), recipient of a University of Guelph Master's degree in 1971 and an enthusiastic participant in a wide range of activities of the University of Guelph Alumni Association for many years. Application not required.	
<i>Donor(s):</i>	<b>Dr. Freeman McEwen and family</b>
<i>Qualification(s):</i>	Outstanding students in the BASc co-op program. The first scholarship is awarded on admission to a student's first co-op work semester on the basis of academic performance in all courses completed prior to the first co-op work semester. The second scholarship is awarded to a student entering the second co-op work semester, based on an outstanding rating both on the student's Work Report and the Supervisor's Report on the student's performance, as well as on the basis of academic performance in all courses completed prior to the second co-op work semester.
<i>Amount:</i>	2 awards of \$750
<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal
<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal
<b>Waterloo-Wellington CA Association Award [I0367]</b>	
Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Waterloo-Wellington Chartered Accountants Association</b>
<i>Qualification(s):</i>	Student who achieves the highest academic standing in the course AGE*3330, Intermediate Accounting.
<i>Amount:</i>	1 award of \$100
<b>William Furlong Scholarship in Microeconomics [I0582]</b>	
The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON*1050) in the fall semester. Application not required.	
<i>Donor(s):</i>	<b>Colleagues &amp; Friends of Dr. William Furlong</b>
<i>Qualification(s):</i>	Full-time students enrolled in Introductory Microeconomics (ECON*1050)
<i>Amount:</i>	3 awards of \$200

## In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000
<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000
<b>Erin Demers Memorial Scholarship [I0406]</b>	
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 April 1 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.	
<i>Donor(s):</i>	<b>Family and friends of Erin Katrina Demers</b>
<i>Qualification(s):</i>	A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.
<i>Amount:</i>	1 award of \$2,000
<b>Euclid-Hitachi Scholarships [I4517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Euclid-Hitachi of Canada Ltd.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

**FACS '85 Heritage Scholarship [I4537]**

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 cover letter outlining the extent of community volunteerism or involvement in an on-campus student club, particularly as it relates to your area of study. ACCESS AWARD

*Donor(s):* **The Class of FACS '85**

*Qualification(s):* Student enrolled in either the BASc program or the Marketing Management or Housing and Real Estate Management major of the B.COMM. program who has completed at least 10.0 course credits with a minimum 70% cumulative average and has 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 \$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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**Helen G. West ACCESS Scholarship [I4391]**

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 cover letter outlining the extent of involvement in extracurricular activities. ACCESS AWARD

*Donor(s):* **Nancy Sawyer, Mary Helen Simpson, their families, and Belle Shirlaw**

*Qualification(s):* A student in any major of the B.A.Sc. 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 a student who has been involved 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 \$1,000

**Kathleen and R. Douglas Kennedy Scholarship in CSAHS [I0546]**

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.).

*Donor(s):* **Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy**

*Qualification(s):* This scholarship will be awarded to a student in CSAHS with high academic achievement. Preference will be given to students registered in the Department of Family Relations and Applied Nutrition, the School of Hospitality and Tourism Management, or the Department of Marketing and Consumer Studies and to students with demonstrated financial need.

*Amount:* 1 award of \$1,000

**Mrs. Elsa Hevenor Stewart Scholarships [I0271]**

Endowment fund provided by the estate of Mrs. Elsa H. Stewart, formerly of Pakenham, Ontario, to students with financial need. Awarded in the Winter semester. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).

*Donor(s):* **The Estate of Elsa Hevenor Stewart**

*Qualification(s):* Students enrolled in the BASc program who have completed at least 15 credits but no more than 17.5 credits with demonstrated financial need. Selection will be based on the greatest need.

*Amount:* 2 awards of \$1,000

**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 by letter, including a summary of local agricultural activities and a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. ACCESS AWARD

*Donor(s):* **The Shaw Scholarship Committee**

*Qualification(s):* Students registered in the B.A.Sc., B.Comm. in Agricultural Business, B.Sc.(Agr.) or D.V.M. programs studying agriculture, horticulture, equine studies, food and nutrition or veterinary sciences with demonstrated financial need, a 70% cumulative average and involvement in local agricultural activities. Preference will be given to first year 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 \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

*Donor(s):* **The Giuliani Family**

*Qualification(s):* Most academically promising applicant with a demonstrated disability and having financial need.

*Amount:* 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

*Donor(s):* **University of Guelph Retirees Association (U.G.R.A.)**

*Qualification(s):* Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

*Amount:* 1 award of \$1,000

**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. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) ACCESS AWARD

**Donor(s):** Doug MacDougald, D.V.M.

**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.Sc.(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:** 2 awards of \$1,000

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The William and Nona Heaslip Foundation

**Qualification(s):** Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

**Amount:** 2 awards of \$15,000

**Yeandle Family In-Course 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. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Awards will be made on the basis of financial need and academic achievement. ACCESS AWARD

**Donor(s):** The Estate of Audrey Yeandle

**Qualification(s):** Full-time undergraduate students registered in each of the eight academic units and CIDS within the College of Social and Applied Human Sciences. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Awards will be made on the basis of financial need and academic achievement.

**Amount:** Several awards up to \$2,000

**In-course Awards with Financial Need****Archie and Isabelle (Cook) Rintoul CSAHS Bursary [I3018]**

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. Two awards of \$500 (one in each of the two colleges).

**Donor(s):** Archie and Isabelle (Cook) Rintoul

**Qualification(s):** Students enrolled in the B.A.Sc. program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program and the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs. Students who have completed semester 4 (10.00 credits) and who have demonstrated financial need are eligible.

**Amount:** 2 awards of \$500

**Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

**Donor(s):** University of Guelph

**Qualification(s):** Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

**Amount:** 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Burnbrae Farms

**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

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Class of '72: 25th Reunion

**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

**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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

**Donor(s):** Mrs. Elizabeth Burton

**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 up to \$2000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Established by the Miles Family

**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 \$1,500

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Gryphon Investment Council Inc.

**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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

**Amount:** Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s):** Undergraduate Students

**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 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.

**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. Awarded in the Winter semester. 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

**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):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

**Donor(s):** Mrs. Norma L. Valeriotte

**Qualification(s):** Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.

**Amount:** Several 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. Awarded in the Winter semester.

**Donor(s):** Family and friends of Irvine and Grace B.L.A.ck

**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

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Estate of Mary I. Whitelock

**Qualification(s):** All undergraduate, graduate or O.A.C. diploma 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

**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.

**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

**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. Awarded in the Winter semester.

**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

**Robert Auger Humanitarian Bursary [I3058]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

**Donor(s):** Office of Registrarial Services

**Qualification(s):** Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

**Amount:** Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

<b>Scotiabank Bursaries [I3532]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Scotiabank</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Stoney Creek Women's Institute Bursaries [I3017]</b>	
Established by the Stoney Creek Women's Institute to commemorate the Sixtieth Anniversary of its founding. Apply by October 7 to Student Financial Services.	
<i>Donor(s):</i>	<b>Stoney Creek Women's Institute</b>
<i>Qualification(s):</i>	Students from the region of Hamilton-Wentworth in the B.A.Sc. program whose scholastic standing is satisfactory and who require financial aid.
<i>Amount:</i>	2 awards of \$250
<b>University of Guelph Access Bursaries [I3522]</b>	
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000	
<i>Donor(s):</i>	<b>Alumni and Friend of the University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of \$500, Several awards of \$2,000
<b>University of Guelph Alumni Association Access Bursaries [I3523]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>University of Guelph Alumni Association</b>
<i>Qualification(s):</i>	Full-time in-course students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,000
<b>University of Guelph Child Care Bursaries [I3053]</b>	
In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.
<i>Amount:</i>	Several awards of up to \$2,000
<b>University of Guelph International Bursary [I3048]</b>	
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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several varies

<b>University of Guelph Undergraduate In-Course Bursaries (MET-TR-UG) [I3037]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards ranging in value from \$100 to \$3,000
<b>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [I3047]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards to a maximum of \$800
<b>University Police Bursaries [I3019]</b>	
The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The University Police</b>
<i>Qualification(s):</i>	Full-time undergraduate and graduate students who have financial need.
<i>Amount:</i>	Several of various amounts
<b>University Student Assistance Program [I3057]</b>	
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. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of various amounts to a maximum of \$1,000
<b>In-course Travel Grants</b>	
<b>Aeroplan International Travel Grant [T0604]</b>	
Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.	
<i>Donor(s):</i>	<b>Aeroplan</b>
<i>Qualification(s):</i>	Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.
<i>Amount:</i>	1 plane ticket per each semester
<b>Arthur D. Latornell Undergraduate Travel Grants [T0058]</b>	
An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.	
<i>Donor(s):</i>	<b>The Estate of Arthur D. Latornell</b>
<i>Qualification(s):</i>	Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.
<i>Amount:</i>	several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

*Donor(s):* **Canadian Friends of the Hebrew University in Jerusalem**

*Qualification(s):* Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 3 Awards with varying amounts

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

*Donor(s):* **The Estate of Richard Hungerford**

*Qualification(s):* Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

*Donor(s):* **University of Guelph**

*Qualification(s):* Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

*Amount:* Several up to \$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

<b>Alumni Entrance Merit Scholarship, College of Arts [E0477]</b>	
Established the College of Arts and the Development and Public Affairs Office. Application not required.	
<i>Donor(s):</i>	<b>Development and Public Affairs Office</b>
<i>Qualification(s):</i>	Student entering the B.A. program in the College of Arts in the Fall semester with the highest admission average.
<i>Amount:</i>	1 award of \$1,000
<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>December 6th Memorial Scholarship [E0005]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Physical and Engineering Science. 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. Demonstrated financial need may also be considered.
<i>Amount:</i>	1 2250 (\$750 in each of semesters 1, 3 and 5).

<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Earl B. MacNaughton Entrance Scholarships [E0172]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students with high academic standing, entering an honours program in the College of Physical and Engineering Science. Emphasis will be given to academic achievement in high school science and mathematics.
<i>Amount:</i>	4 awards of \$1,000
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000
<b>Frederick Hung Memorial Award [E0320]</b>	
The colleagues and family of the late Prof. Frederick Hung make available an entrance award to encourage students to major in Geography. Application not required.	
<i>Donor(s):</i>	<b>The family and friends of Frederick Hung</b>
<i>Qualification(s):</i>	Student entering the Bachelor of Arts (Geography Major) degree program directly from high school. The award will be given to the student who has achieved the highest mark in grade 12U/M Geography or its equivalent and at least an 80% average overall.
<i>Amount:</i>	1 award of \$900
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>Honours Mathematics or Statistics Scholarship [E0131]</b>	
This scholarship is awarded to the student with the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Faculty of the Department of Mathematics and Statistics, via the C.P.E.S. Scholarship Fund</b>
<i>Qualification(s):</i>	Student entering semester one of the Honours Mathematics or Statistics degree program.
<i>Amount:</i>	1 award of \$500
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000

**J.D. MacLachlan Scholarship [E0170]**

Provided by the family of J.D. MacLachlan. Application not required.

*Donor(s):* **The J.D. MacLachlan Trust**

*Qualification(s):* Student entering the University with the highest admission average.

*Amount:* 1 award of \$1,500

**Lincoln Alexander Chancellor's Scholarship [E0493]**

These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

*Donor(s):* **Many Donors**

*Qualification(s):* Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.

*Amount:* 2 awards of \$26,000

**Mary Alice & Marion Munn Memorial Entrance Scholarship [E0418]**

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 award is made in two installments, one in each of the Fall and Winter semesters of the first year of study. The second installment will be paid on successful completion of MUSC\*1500 and registration in MUSC\*1510. Apply when signing up for an audition for MUSC\*1500 Applied Music I, which takes place on the Special Schedule days in the Fall semester. Following this audition, a final round will be held within one month to select the winner.

*Donor(s):* **Dr. John Munn**

*Qualification(s):* A student entering the B.A. program intending to major in Music 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. In the event that two or more applicants are closely matched, preference will be given to the applicant who has the highest entrance average.

*Amount:* 1 award of \$2,500

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

*Donor(s):* **Wilhelmina McArthur-Humphries Trust Fund**

*Qualification(s):* Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

*Amount:* 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

*Donor(s):* **Paul and Aileen Clarke**

*Qualification(s):* Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

*Amount:* 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

*Donor(s):* **A number of President's Scholarships have been named in honour of the following people and/or donors:**

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):* Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

*Amount:* 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

*Donor(s):* Mrs. Helen Quinn (O.A.C. '35)

*Qualification(s):* Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

*Amount:* 1 award of \$1,500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* Jack and Lillian MacDonald

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

*Donor(s):* University of Guelph

*Qualification(s):* Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

*Amount:* Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

*Donor(s):* University of Guelph Faculty Association

*Qualification(s):* Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

*Amount:* 1 award of \$2,250

**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 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

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

*Donor(s):* Ross and Mary Lou Klopp

*Qualification(s):* Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

*Amount:* 1 award of \$500

**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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.

*Donor(s):* The Blount Foundation, Inc.

*Qualification(s):* Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. 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

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

*Donor(s):* University of Guelph

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic merit.

*Amount:* 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

*Donor(s):* Rol-Land Farms

*Qualification(s):* Outstanding entering undergraduate degree students 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

*Amount:* 150 awards of \$9,000

**Entrance Awards with Financial Need****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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).

*Donor(s):* **W. Roy Hindle and family**

*Qualification(s):* An entering O.A.C. degree student who has 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

**Harvey Graham Bursary [E3030]**

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

**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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

**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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

**In-course Scholarships****A.M. Ross Centennial Scholarship [I0249]**

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 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

**Agnes Varies Scholarship in Women's Studies [I0596]**

Established by Dr. Agnes Varies, 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 April 1.

*Donor(s):* **Dr. Agnes Varies**

*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 Award [I0176]**

Established in memory of Aino Menning. Application not required.

*Donor(s):* **M. 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

**Andrea Laatsch Scholarship [I0168]**

Application 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 \$250

**Austrian Embassy Prize [I0022]**

Provided by the Austrian Embassy. May be awarded in addition to Swiss or German Consulate Prizes. Application not required. Two book prizes.

*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. Application not required.

*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 April 1.

*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 by April 1.

*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.

*Amount:* 1 award of \$500

<b>C.A.S.U. (College of Arts Student Union) Award [I0161]</b>
Apply by letter to Student Financial Services by April 1 stating area of participation, dates of participation and nature of contribution. This award may be held once only. <i>Donor(s):</i> C.A.S.U. <i>Qualification(s):</i> Student within the College of Arts who has completed semesters 3 - 8, and who participated in the social, political and cultural life of the University. <i>Amount:</i> 1 award of \$200
<b>C.A.S.U. (College of Arts Student Union) Book Prizes [I0155]</b>
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. <i>Donor(s):</i> C.A.S.U. <i>Qualification(s):</i> Students enrolled in the College of Arts who have completed semesters 3, 4, 5 and 6, in the B.A. program. The recipient will have attained a 70% average in their major, and have demonstrated significant volunteer participation in the social, political or cultural life of the University of Guelph. <i>Amount:</i> 8 Book prizes
<b>C.M. and D.J. Switzer Scholarships [I0276]</b>
Apply by April 1 to Student Financial Services. <i>Donor(s):</i> C.M. and D.J. Switzer <i>Qualification(s):</i> One to a student who has completed semester 2 of the Diploma in Agriculture program and one to a student who has completed semester 4 of a degree program in O.A.C. Recipients will have a minimum of 70% standing and have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal. <i>Amount:</i> 1 award of \$2,000
<b>Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]</b>
Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards Committee by April 1 with a summary of participation in the Ag Ec & Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member. <i>Donor(s):</i> Canadian Agri-Marketing Association (Ontario) <i>Qualification(s):</i> Student who has competed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec & Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing. <i>Amount:</i> 1 award of \$1,500
<b>Canadian Federation of University Women/Guelph Scholarship [I0294]</b>
The Guelph Chapter of the Canadian Federation of University Women provides this annual scholarship. Application not required. <i>Donor(s):</i> The Guelph Chapter of the Canadian Federation of University Women <i>Qualification(s):</i> Female student registered in Year 3 in the Fall semester in either B.Sc.(Eng.), B.A. (College of Physical and Engineering Science) or B.Sc.(College of Physical and Engineering Science) who has the highest cumulative average. Preference will be given to a student who has graduated from a secondary school in Wellington County. <i>Amount:</i> 1 award of \$2,000
<b>Certified General Accountants Award for Excellence Prize [C0025]</b>
Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required. <i>Donor(s):</i> Certified General Accountants Association of Ontario <i>Qualification(s):</i> Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGECE*2220; Management Accounting AGECE*2230; and Intermediate Accounting AGECE*3330. <i>Amount:</i> 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)
<b>CFRU Volunteer Award [I0215]</b>
Apply to the CFRU Board of Governors by April 30. <i>Donor(s):</i> Station Manager, CFRU <i>Qualification(s):</i> Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU. <i>Amount:</i> 2 awards of \$250

<b>Charles McGowan Memorial Prize [C0187]</b>
Established in memory of the late Lieutenant Charles McGowan. Application not required. <i>Donor(s):</i> Charles McGowan Memorial Fund <i>Qualification(s):</i> Outstanding graduating student in an O.A.C. degree program. <i>Amount:</i> 1 award of \$300
<b>CIDS: Biophysical Environment and Development Award [C0461]</b>
Established by the College of Social and Applied Human Sciences. Presented in the Winter semester. Application not required. <i>Donor(s):</i> College of Social and Applied Human Sciences <i>Qualification(s):</i> Outstanding student, who has achieved academic excellence, a minimum cumulative average of 80%, and service to the international community. The student will have completed at least 15.00 credits and will graduate in the Winter or expect to graduate in the Spring or Fall convocation ceremonies upon completion of their final year of the Biophysical Environment and Development area of emphasis of the honours International Development degree. <i>Amount:</i> 1 award of \$200
<b>CIDS: Economics and Business Development Award [C0460]</b>
Established by the College of Social and Applied Human Sciences. Presented in the Winter semester. Application not required. <i>Donor(s):</i> College of Social and Applied Human Sciences <i>Qualification(s):</i> Outstanding student, who has achieved academic excellence, a minimum cumulative average of 80%, and service to the international community. The student will have completed at least 15.00 credits and will graduate in the Winter or expect to graduate in the Spring or Fall convocation ceremonies upon completion of their final year of the Economics and Business development area of emphasis of the honours International Development degree. <i>Amount:</i> 1 award of \$200
<b>CIDS: Gender and Development Award [C0462]</b>
Established by the College of Social and Applied Human Sciences. Presented in the Winter semester. Application not required. <i>Donor(s):</i> College of Social and Applied Human Sciences <i>Qualification(s):</i> Outstanding student, who has achieved academic excellence, a minimum cumulative average of 80%, and service to the international community. The student will have completed at least 15.00 credits and will graduate in the Winter or expect to graduate in the Summer or Fall convocation periods upon completion of his/her final year of the Gender and Development area of emphasis of the honours International Development degree. <i>Amount:</i> 1 award of \$200
<b>CIDS: Latin America Studies Award [C0469]</b>
Established by the College of Social and Applied Human Sciences. Presented in the Winter semester. Application not required. <i>Donor(s):</i> College of Social and Applied Human Sciences <i>Qualification(s):</i> Outstanding student, who has achieved academic excellence, a minimum cumulative average of 80%, and service to the international community. The student will have completed at least 15.00 credits and will graduate in the Winter or expect to graduate in the Spring or Fall convocation ceremonies upon completion of their final year of the Latin American Studies area of emphasis of the honours International Development degree. <i>Amount:</i> 1 award of \$200
<b>CIDS: Political Economy and Administrative Change Award [C0458]</b>
Established by the College of Social and Applied Human Sciences. Presented in the Winter semester. Application not required. <i>Donor(s):</i> College of Social and Applied Human Sciences <i>Qualification(s):</i> Outstanding student, who has achieved academic excellence, a minimum cumulative average of 80%, and service to the international community. The student will have completed at least 15.0 credits and will graduate in the Winter or expect to graduate in the Spring or Fall convocation ceremonies upon completion of their final year of the Political Economy and Administrative Change area of emphasis of the honours International Development degree. <i>Amount:</i> 1 award of \$200

<b>CIDS: Rural Agricultural and Development Award [C0457]</b>	
Established by the College of Social and Applied Human Sciences. Presented in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>College of Social and Applied Human Sciences</b>
<i>Qualification(s):</i>	Outstanding student, who has achieved academic excellence, a minimum cumulative average of 80%, and service to the international community. The student will have completed at least 15.00 credits and will graduate in the Winter or expect to graduate in the Spring or Fall convocation ceremonies upon completion of their final year of the Rural and Agricultural Development area of emphasis of the honours International Development degree.
<i>Amount:</i>	1 award of \$200
<b>Class of '51 O.A.C. Leadership Awards [C0063]</b>	
Established by Year '51 O.A.C., on the occasion of its 45th anniversary. At the discretion of the O.A.C. Awards Committee students may be selected before graduation. Application not required.	
<i>Donor(s):</i>	<b>Year '51 O.A.C.</b>
<i>Qualification(s):</i>	Students graduating from the degree program in a major in an O.A.C. department who have a 70% standing in the final year of study and who have demonstrated leadership in the College or University extracurricular activities.
<i>Amount:</i>	4 awards of \$1,000
<b>Class of '67 O.A.C. Centennial Scholarship [I0067]</b>	
Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Class of O.A.C. '67</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000
<b>Class of 1970 Scholarship [I0424]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,400
<b>College of Arts Medal [C0383]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Office of the Dean of Arts</b>
<i>Qualification(s):</i>	Awarded to the graduating student with the highest cumulative average.
<i>Amount:</i>	1 Medal
<b>College of Physical Engineering Science Academic Scholarship [I0073]</b>	
Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Offered in the Winter semester to students who have completed at least 15.0 course credits in a College of Physical and Engineering Science program and have excellent grades but have not received awards recently.
<i>Amount:</i>	2 awards of \$250
<b>College of Physical Engineering Science Graduation Prize [C0075]</b>	
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application not required. One award of \$250 and a commemorative plaque.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Student graduating with the highest cumulative average from an honours B.Sc. program in a Physical and Engineering Science area.
<i>Amount:</i>	1 award of \$250, 1 Commemorative plaque

<b>College of Physical Engineering Science Scholarship [I0076]</b>	
Awarded in the Fall semester to a student who has completed semester 6 in the previous Fall, Winter or Spring semesters and who is enrolled in Year 4 of a College of Physical and Engineering Science program. Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Recipients will be selected on the basis of a high average (minimum 80% average required) in courses normally taken in Year 3.
<i>Amount:</i>	1 award of \$250
<b>College of Social Science Alumni Heritage In-Course Scholarships [I0492]</b>	
Established in recognition of the valuable contributions made over many years by College of Social Science alumni and the Alumni Association to the life and vitality of the University. Awarded in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>College of Social Science Alumni</b>
<i>Qualification(s):</i>	Students registered in the C.S.A.H.S. with the highest cumulative program average of at least 80.0% who have completed between 10.00 and 12.50 course credits and who registered in C.S.A.H.S. in the subsequent Fall Semester. One scholarship will be awarded to a full or part-time student registered in a program offered by each of the following six C.S.A.H.S. administrative and academic units: Economics, Geography, International Development Studies, Political Science, Psychology and Sociology and Anthropology. This scholarship may be held once only.
<i>Amount:</i>	6 awards of \$1,000
<b>Collins Barrow Award [I0040]</b>	
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i>	Student with the highest grade in course AGEC*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i>	1 award of \$500
<b>Constas Prize [C0079]</b>	
This scholarship is offered in memory of Helen Constas, by the Department of Sociology and Anthropology. It will be awarded at the Spring Convocation. Application not required.	
<i>Donor(s):</i>	<b>The Department of Sociology and Anthropology, CSAHS</b>
<i>Qualification(s):</i>	Student who is graduating with distinction (or has graduated at the previous Winter or Fall Convocation) in a major in an honours program offered by the Department of Sociology and Anthropology, and who has the highest cumulative average above 80% in Sociology and Anthropology courses.
<i>Amount:</i>	1 award of \$100
<b>Consul General of Belgium Prize for French House [I0080]</b>	
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 at the end of the Winter semester by the Belgian Consul General. Application not required.	
<i>Donor(s):</i>	<b>Consul General of Belgium in Toronto</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Book Prize
<b>CSAHS Student Volunteer Scholarship [I0482]</b>	
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. Applications are available from the CSAHS Dean's Office. Apply to the CSAHS Dean's Office with a completed application form, 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, and 2 letters of recommendation by April 1. This scholarship will be awarded to the Student Volunteer of the year to help defray the costs associated with volunteerism. One award of \$350 (an equal amount will be awarded to the charitable organization of the recipient's choice).	
<i>Donor(s):</i>	<b>Harshman Fellowship Society and Pfizer Canada Inc.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$350

**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 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

**David F. Boyes Apiculture Scholarship [I0031]**

Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application 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 \$150

**David Murray Medal in Arts [C0071]**

The recipient is selected by the Awards Committee of the College of Arts. Application not required. One award of a medal and \$200.

*Donor(s):* **College of Arts**

*Qualification(s):* College of Arts nominee for the Winegard Medal.

*Amount:* 1 award of \$200, 1 Medal

**Deans' Scholarships [I0323]**

Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.

*Donor(s):* **Board of Governors**

*Qualification(s):* Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.

*Amount:* 150 awards of \$1,000

**Dr. Charles Capstick Graduation Prize [C0558]**

Provided by the Department of Computing and Information Science, these scholarships are awarded in May to students who have completed an undergraduate degree in a Computing and Information Science program and have achieved the highest and second highest cumulative averages at graduation. Application not required.

*Donor(s):* **Department of Computing and Information Science**

*Qualification(s):* Students who have completed an undergraduate degree in Computing and Information Science (CIS) in the previous twelve months.

*Amount:* 1 award of \$500, 1 award of \$300

**Dr. James Linders Scholarship [I0559]**

Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 3 Computing and Information Science core courses. Application not required.

*Donor(s):* **Department of Computing and Information Science**

*Qualification(s):* Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 15.0 to 17.5 course credits and have taken the CIS core courses required for Year 3.

*Amount:* 1 award of \$500, 1 award of \$300

**Dr. Mary McLeish Scholarship [I0560]**

Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 1 Computing and Information Science core courses. Application not required.

*Donor(s):* **Department of Computing and Information Science**

*Qualification(s):* Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 5.0 to 7.5 course credits and have taken the CIS core courses required for Year 1.

*Amount:* 1 award of \$500, 1 award of \$300

**Dr. Ted Swart Scholarship [I0561]**

Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 2 Computing and Information Science core courses. Application not required.

*Donor(s):* **Department of Computing and Information Science**

*Qualification(s):* Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 10.0 to 12.5 course credits and have taken the CIS core courses required for Year 2.

*Amount:* 1 award of \$500, 1 award of \$300

**E.A. (Nora) Cebotarev Prize [C0464]**

Established by the Department of Sociology and Anthropology to honour Professor Emerita E.A. (Nora) Cebotarev's outstanding contribution to graduate programs in Sociology and Anthropology and to the life of the department and the larger community. Presented in the Fall semester. Application not required.

*Donor(s):* **Department of Sociology and Anthropology**

*Qualification(s):* Graduating student with an honours specialization from the Department of Sociology and Anthropology who has excelled academically by achieving a minimum cumulative average of 80% and has served the university and larger community.

*Amount:* 1 Book prize

**E.B. MacNaughton Convocation Prize [C0171]**

Established by the College of Physical and Engineering Science to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application not required. One award of a plaque-mounted medal and \$250.

*Donor(s):* **The College of Physical and Engineering Science**

*Qualification(s):* The College of Physical and Engineering Science nominee for the Winegard Medal.

*Amount:* 1 award of \$250, 1 Plaque-mounted medal

**Edmund C. Bovey Scholarship in Philosophy [I0113]**

Donated by Sandra and Joseph Rotman. The award will be made in 2 installments of \$500 payable after registration in semesters 7 and 8. Application not required.

*Donor(s):* **The Joseph Louis Rotman Charitable Foundation**

*Qualification(s):* Awarded to the student with the highest cumulative average in Philosophy courses who has completed 6 semesters in the major honours, combined honours, or specialized honours program in Philosophy.

*Amount:* 1 award of \$1,500

**Ellen Nilsen Memorial Award [I0047]**

Offered by the friends of Ellen Nilsen. Apply to the Director of the Collaborative International Development Studies Programme, Rm 702 MacKinnon Building, by October 7.

*Donor(s):* **The Friends of Ellen Nilsen**

*Qualification(s):* Academically outstanding woman from a developing country who is registered at the University of Guelph in an undergraduate or a graduate program and who has demonstrated a commitment to social change.

*Amount:* 1 award of \$1,500

**Essay Prize in Music [I0357]**

Essays should be submitted to the Director of the School of Fine Art and Music.

*Donor(s):* **The Department of Music**

*Qualification(s):* Student with at least Honours standing in the Honours Music Major or Minor program for the best research paper submitted in a 3000 or 4000 level music course (excluding papers written for MUSC\*4401/2).

*Amount:* 1 award of \$100

**Essays in Theatre/Etudes Theatrales Prize [I0115]**

Awarded in the Winter semester. Application not required.

*Donor(s):* **The Department of Drama**

*Qualification(s):* Student in a major or honours program in Drama with the highest cumulative average at the end of the 5th semester.

*Amount:* 1 Book prize

**Evelyn Matheson Pepper Memorial Scholarship [I0538]**

The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.

*Donor(s):* **Ms. Barbara Stuart and Ms. Susan Pepper**

*Qualification(s):* Student who achieves the highest grade in the course FRHD\*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.

*Amount:* 1 award of \$1,000

<b>F.A. Dahms Geography Alumni Scholarship [I0500]</b>	
Established in honour of the retirement of Dr. Fred Dahms, one of the founding members and former Chair (1968-74) of the Department of Geography, by alumni, colleagues and friends. Application not required.	
<i>Donor(s):</i>	<b>Alumni, colleagues and friends of Dr. Fred Dahms, Department of Geography</b>
<i>Qualification(s):</i>	Full-time or part-time undergraduate student who has completed 15.00 credits in the major honours program in the Department of Geography.
<i>Amount:</i>	1 award of \$500

<b>Faculty Prize in Classics [I0098]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Dr. J.M. Bell and Dr. V.J. Mathews</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	2 awards of \$100

<b>Frederick Vaughan Political Science Scholarship [I0513]</b>	
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. Apply by letter to the Chair of the Department of Political Science by April 1st. The letter should include a brief description of the student's activities, interests, and/or involvement with Canadian politics, Constitution, and/or court system as well as a comprehensive listing of his/her extracurricular activities.	
<i>Donor(s):</i>	<b>Mr. Bernard Cummins, family and friends</b>
<i>Qualification(s):</i>	Undergraduate student majoring in Political Science or Criminal Justice and Public Policy, who has competed between 12.5 and 15.0 credits with a minimum 77% cumulative average, with a particular emphasis on courses in the area of Canadian politics. The award winner will be selected on the basis of academic achievement and leadership ability as demonstrated through extracurricular involvement. Preference will be given to a student who has shown a particular interest in the Canadian constitution and the courts.
<i>Amount:</i>	1 award of \$500

<b>French Consul Prize [I0105]</b>	
Selection by Faculty in French Studies (School of Languages and Literatures).	
<i>Donor(s):</i>	<b>French Consul</b>
<i>Qualification(s):</i>	Offered to a student for work in oral French.
<i>Amount:</i>	1 Book prize

<b>Friends of Music Book Prize [I0218]</b>	
Established by the Friends of Music of the University of Guelph. Application not required.	
<i>Donor(s):</i>	<b>Friends of Music, Chair, Department of Music</b>
<i>Qualification(s):</i>	Student who, in a given year, has completed at least 15.00 credits toward the honours B.A. with a major in Music and has the highest cumulative average in Music courses.
<i>Amount:</i>	1 (or more) Book prize(s)

<b>Friends of Music In-Course Scholarship [I0195]</b>	
Established by the Friends of Music of the University of Guelph. Application not required.	
<i>Donor(s):</i>	<b>Friends of Music, Chair, Department of Music</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$600

<b>Friends of Music In-Course Scholarship in Applied Music [I0497]</b>	
Established by the Friends of Music of the University of Guelph. Application not required.	
<i>Donor(s):</i>	<b>Friends of Music, Chair, Department of Music</b>
<i>Qualification(s):</i>	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%.
<i>Amount:</i>	1 award of \$600

<b>Geography Alumni Semester 4 Scholarship [I0368]</b>	
Offered through the Alma Mater Fund by the Geography Alumni. Application not required.	
<i>Donor(s):</i>	<b>The Department of Geography</b>
<i>Qualification(s):</i>	Student who has completed 10.0 course credits in a major honours program in the Department of Geography. The scholarship will be awarded competitively in September of each year based on cumulative academic performance.
<i>Amount:</i>	1 award of \$800

<b>Geography Alumni Semester 6 Scholarship [I0385]</b>	
Offered through the Alma Mater Fund by the Geography Alumni. Application not required.	
<i>Donor(s):</i>	<b>Department of Geography</b>
<i>Qualification(s):</i>	Student who has completed 15.0 course credits in a major honours program in the Department of Geography. The scholarship will be awarded competitively in September of each year based on cumulative academic performance.
<i>Amount:</i>	1 award of \$800

<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>	
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<i>Donor(s):</i>	<b>Mrs. George A. Gray</b>
<i>Qualification(s):</i>	Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i>	2 awards of \$1,250

<b>George Grant Memorial Prize [C0472]</b>	
Established in memory of George Grant by Dr. William Christian, a Professor in the Department of Political Science. Application not required.	
<i>Donor(s):</i>	<b>Dr. William Christian</b>
<i>Qualification(s):</i>	Student in the B.A. honours program majoring in Political Science and graduating with the highest cumulative average in all degree courses.
<i>Amount:</i>	1 award of \$200

<b>German Consulate Prize [C0110]</b>	
Presented in the Spring semester.	
<i>Donor(s):</i>	<b>Consulate General of the Federal Republic of Germany</b>
<i>Qualification(s):</i>	Students who are graduating from an honours program in German Studies.
<i>Amount:</i>	3 Book prizes

<b>Gloria Guthrie Memorial Music Scholarship [C0346]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Estate of Professor James R. Guthrie</b>
<i>Qualification(s):</i>	Student graduating in honours Music who has obtained the highest average above 80% in Music courses.
<i>Amount:</i>	1 award of \$500

<b>Gold Medal in English [C0112]</b>	
This gold medal is offered by the faculty of the English Section of the School of Literatures and Performance Studies in English. Application not required.	
<i>Donor(s):</i>	<b>Faculty of the Department of English</b>
<i>Qualification(s):</i>	Graduating student who has achieved the highest standing in honours 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.
<i>Amount:</i>	1 Gold medal

<b>Gonder Family Centre for Students with Disabilities Volunteer Award [I0563]</b>
In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Centre for Students with Disabilities (CSD) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the CSD. The award will be made on the basis of the volunteer activities undertaken by the student at the CSD, 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 CSD (c/o Advisor to Students with Disabilities) by submitting above documentation.
<i>Donor(s):</i> <b>Dr. John and Mrs. Katherine Gonder</b>
<i>Qualification(s):</i> 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 CSD.
<i>Amount:</i> 1 award of \$900
<b>Gonder Family Scholarship [I0580]</b>
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 CSAHS major of the B.Comm. program. Application not required.
<i>Donor(s):</i> <b>Dr. John and Mrs. Katherine Gonder</b>
<i>Qualification(s):</i> All students in the CSAHS 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 Centre for Students with Disabilities.
<i>Amount:</i> 1 award of \$900
<b>Governor General's Medal [C0044]</b>
Established by the Office of the Governor General of Canada. Application not required.
<i>Donor(s):</i> <b>The Chancellery</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Silver medal
<b>Guelph Creative Arts Association, Gordon Couling Scholarship [I0117]</b>
Application for this scholarship is to be made by submitting a portfolio of studio work through the office of the School of Fine Art and Music no later than the final day of classes of the Winter semester.
<i>Donor(s):</i> <b>Guelph Creative Arts Association</b>
<i>Qualification(s):</i> Studio Arts major who has completed, or is completing, 12.50 credits at the time of application, who is proceeding towards an honours degree in Studio Arts, and who has a cumulative average of at least 70% in all previous course attempts in Art History and Studio Arts.
<i>Amount:</i> 1 award of \$200
<b>Highdale Farms Scholarship [I0348]</b>
Apply to Student Financial Services, by April 1.
<i>Donor(s):</i> <b>Arthur Spoerri</b>
<i>Qualification(s):</i> Two awards are available for students in semesters 3 through 6 with at least a 75% cumulative average and whose primary area of study is related to the natural sciences. The first award is based on academic proficiency. The second award is based on academic proficiency and demonstrated leadership with preference given to students from Ottawa-Carleton, Dundas-Glenarry-Stormont, Grenville, Lanark, Prescott-Russell and Renfrew counties.
<i>Amount:</i> 2 awards of \$2,500
<b>International Undergraduate Scholarship [I0577]</b>
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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.
<i>Donor(s):</i> <b>International Student Organization (ISO)</b>
<i>Qualification(s):</i> Full-time International 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 75%, and is registered at the time of application.
<i>Amount:</i> 1 award of \$1,000

<b>Italian Consulate Prize in Italian Studies [I0143]</b>
Application not required.
<i>Donor(s):</i> <b>Consulate General of the Republic of Italy</b>
<i>Qualification(s):</i> Student intending to continue the study of Italian presently enrolled in ITAL*2070 or ITAL*1070 who obtains the highest standing in the course.
<i>Amount:</i> 1 Book prize
<b>J. Percy Smith Drama Prize [C0261]</b>
Application not required.
<i>Donor(s):</i> <b>Dr. J. Percy Smith</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$200
<b>J.M. Bell Classics Scholarship [I0204]</b>
Established in memory of Dr. John M. Bell, a distinguished teacher of classics and Chair of the Department of Languages and Literatures. Application not required.
<i>Donor(s):</i> <b>J.M. Bell Memorial Fund</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$500
<b>J.W. Skinner Honours Scholarship in Social Science [I0259]</b>
This award is not tenable with the College of Social and Applied Human Sciences or B.A. program Senate Awards. Application not required.
<i>Donor(s):</i> <b>Faculty, staff, alumni and students, of the former College of Social Science</b>
<i>Qualification(s):</i> Student of high academic standing who has completed the 6th semester and is proceeding in a specialized or major honours program in the Departments of Economics, Geography, Political Science, Psychology, Sociology and Anthropology or a social science interdisciplinary program.
<i>Amount:</i> 1 award of \$250
<b>J.W. Skinner Medal in Social Science [C0260]</b>
Application not required.
<i>Donor(s):</i> <b>Faculty, staff, alumni and students, of the former College of Social Science</b>
<i>Qualification(s):</i> Presented to the Winegard Medal nominee selected from candidates from the Departments of Economics, Geography, Political Science, Psychology, Sociology and Anthropology, or a social science interdisciplinary program.
<i>Amount:</i> 1 Medal
<b>Jack Madden Medal in Economic History [C0173]</b>
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 not required. One award of a medal and \$200.
<i>Donor(s):</i> <b>Department of Economics with the assistance of Dr. Warren Jestin</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$200, 1 Medal
<b>Jakob Amstutz Prize [C0407]</b>
Established in memory of Jakob Amstutz, a valued faculty member of the Philosophy department for more than twenty years. Application not required.
<i>Donor(s):</i> <b>Guelph Philosophical Society</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$200

<b>James L. Mottin Award for Academic and Extracurricular Excellence [C0344]</b>	
Provided by the Department of Psychology to recognize its nominee for the Winegard Medal. Apply to the Department of Psychology Undergraduate Academic Counsellor by January 15th, including a list of extracurricular activities.	
<i>Donor(s):</i>	<b>The Department of Psychology</b>
<i>Qualification(s):</i>	Student must be enrolled in the B.A. Honours program or the honours specialization in the B.Sc. program majoring in Psychology. The recipient will be selected on the basis of high academic achievement and extracurricular involvement.
<i>Amount:</i>	1 award of \$200
<b>Jean Carter Memorial Gerontology Scholarship [I0488]</b>	
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 letter to the CSAHS Undergraduate Awards Committee, Dean's Office by April 1st, including a statement that outlines the student's experience working with the elderly in a volunteer capacity as well as extracurricular involvement the student may have and two letters of reference, one of which should be from someone who can speak to the student's volunteer experiences with the elderly, while the other should comment on the extracurricular activities of the student.	
<i>Donor(s):</i>	<b>Mr. Robert N. Carter and Family</b>
<i>Qualification(s):</i>	Undergraduate student in the CSAHS who has completed at least 10.0 credits with a minimum 70% cumulative average and has made a significant contribution to the care of the elderly. Preference will be given to students in the BASc program majoring in Gerontology.
<i>Amount:</i>	1 award of \$1,000
<b>Joanna Bartlett Boehnert Memorial Prize in Women's Studies [C0502]</b>	
Established by family, friends and colleagues of the late Dr. Joanna Boehnert, a professor in the Department of Psychology (1968-2001) who established the Guelph Women's Studies program in 1980 and served as the program's coordinator for 14 years. Application not required.	
<i>Donor(s):</i>	<b>Family, friends and colleagues of the late Dr. Joanna Boehnert</b>
<i>Qualification(s):</i>	Graduating honours student majoring in Women's Studies. The award will be presented to the student who has attained the highest cumulative specialization average.
<i>Amount:</i>	1 award of \$1,000
<b>John A. Archibald Memorial Scholarship [I0014]</b>	
Awarded in memory of John A. Archibald, former Director of the Horticultural Research Institute of Ontario. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>The friends and associates of the late John A. Archibald</b>
<i>Qualification(s):</i>	Outstanding student with an interest in courses in the Department of Land Resource Science who has completed semester 6. The recipient will be chosen on the basis both of high academic standing and participation in extracurricular activities.
<i>Amount:</i>	1 award of \$1,200
<b>John Deere Foundation of Canada Scholarship [I0516]</b>	
Established through the generosity of The John Deere Foundation of Canada to recognize academic excellence. Application not required.	
<i>Donor(s):</i>	<b>The John Deere Foundation of Canada</b>
<i>Qualification(s):</i>	Student registered in the B.Sc.(Agr.), 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.
<i>Amount:</i>	1 award of \$2,000
<b>John Eccles Scholarship [I0093]</b>	
Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Student Housing Services</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$600

<b>John F. Melby Honours Thesis Prize [C0189]</b>	
Offered by members of the Department of Political Science, colleagues and friends of Professor Melby. Application not required.	
<i>Donor(s):</i>	<b>Members of the Department of Political Science, colleagues and friends</b>
<i>Qualification(s):</i>	Honours student in Political Science, based on the honours thesis. Must have successfully completed POLS*4980.
<i>Amount:</i>	1 award of \$500
<b>John Kenneth Galbraith Scholarship in Economics [I0108]</b>	
Apply in writing to the Chair, Department of Economics by March 1.	
<i>Donor(s):</i>	<b>The Board of Governors, University of Guelph</b>
<i>Qualification(s):</i>	Student who has completed, or is about to complete, the 5th semester level in the B.A. program, and who has declared intent to proceed in an honours program in Economics. The scholarship will be awarded on the basis of high academic standing, particularly in courses in Economics, Food Agriculture and Resource Economics, Mathematics and Statistics and will be presented after the recipient has registered for the 7th semester level of an honours program in Economics.
<i>Amount:</i>	1 award of \$600
<b>John Vanderkamp Memorial Scholarship in Economics [I0525]</b>	
Provided by the family, friends and colleagues of the late Dr. John Vanderkamp, former Dean of the College of Social Science (1981-91) and Chair of the Department of Economics (1971-1980). Application not required.	
<i>Donor(s):</i>	<b>The family, friends and colleagues of John Vanderkamp</b>
<i>Qualification(s):</i>	Student registered in an Economics specialization in the B.A. program who has competed between 12.5 and 15.0 credits, and has declared his/her intention to proceed in the honours program. The award winner will be selected on the basis of high academic achievement, 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.
<i>Amount:</i>	1 award of \$500
<b>Kenneth W. Hammond Award [I0045]</b>	
The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.	
<i>Donor(s):</i>	<b>Kenneth W. Hammond</b>
<i>Qualification(s):</i>	Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.
<i>Amount:</i>	1 award of \$1,000
<b>Kip Hunter Prize [I0139]</b>	
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 the end of the 12th week of the Winter semester.	
<i>Donor(s):</i>	<b>Faculty, students and staff of the Philosophy Department</b>
<i>Qualification(s):</i>	Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
<i>Amount:</i>	1 Book prize
<b>Lambda Foundation Scholarship in LBGT Studies [I0591]</b>	
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.	
<i>Donor(s):</i>	<b>Lambda Foundation and other donors</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

<b>Lange and Prokipcak Chemistry Scholarship [I0528]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues</b>
<i>Qualification(s):</i>	Student in C.P.E.S. with the highest average grade in CHEM*1040,1050 and 2700 who has completed a minimum of 10.0 credits up to a maximum of 14.75 credits.
<i>Amount:</i>	1 award of \$1,000

<b>Le Prix Leopold Senghor [I0254]</b>	
Donated by the Honorary Consul for Senegal is awarded in even-numbered years. Application not required.	
<i>Donor(s):</i>	<b>Department of Languages</b>
<i>Qualification(s):</i>	Student with good academic standing who has achieved excellence in the study of francophone African literatures, and in particular the literature of Senegal. The recipient will be selected on the basis of performance in the course FREN*3290 with recommendation from the Director of the School of Languages and Literatures.
<i>Amount:</i>	1 Book prize

<b>Leibniz/Newton Scholarship [I0156]</b>	
Established in honour of two founding fathers of calculus. Awarded in the Fall semester. Not tenable with the T.D. Newton Memorial Scholarship. Application not required.	
<i>Donor(s):</i>	<b>The Department of Mathematics and Statistics</b>
<i>Qualification(s):</i>	A second year student majoring in mathematics or statistics (i.e. one who has completed a minimum of 5 credits up to a maximum of 9.75 credits) who has a cumulative average of at least 80% and the highest grades over 80% in MATH*1200 and MATH*1210. A student may be considered for this award only once.
<i>Amount:</i>	1 award of \$500

<b>Leonard Conolly Exchange Student Scholarship [I0446]</b>	
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.	
<i>Donor(s):</i>	<b>Students, staff, faculty and friends of Dr. Leonard Connolly</b>
<i>Qualification(s):</i>	Full-time visiting exchange undergraduate or graduate 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). 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.
<i>Amount:</i>	1 award of \$1,000

<b>Marion McKenzie Prizes for Outstanding Achievement in History [I0470]</b>	
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*1010, HIST*2450, HIST*2602). Application not required.	
<i>Donor(s):</i>	<b>TBA</b>
<i>Qualification(s):</i>	The recipient for HIST*1010 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST*2602, no more than 10.0 credits.
<i>Amount:</i>	3 awards of \$250

<b>Marlene Pike Memorial Award [I0192]</b>	
Provided by the family and friends of Marlene Pike. Application not required.	
<i>Donor(s):</i>	<b>The family and friends of the late Marlene Pike</b>
<i>Qualification(s):</i>	Student majoring in Studio Art who has completed 12.50 credits, including SART*3300 Sculpture II and who is judged to have made an outstanding contribution in sculpture classes as manifested in the quality of work produced as well as in the effort expended and promise shown.
<i>Amount:</i>	1 award of \$400

<b>Mathematics Graduation Prize [C0182]</b>	
Awarded at Summer Convocation. Application not required. One award of \$250 and a commemorative plaque.	
<i>Donor(s):</i>	<b>Faculty members, who will be anonymous, through the College of Physical Science and Engineering Expendable Scholarship Fund</b>
<i>Qualification(s):</i>	The graduating student who has majored in mathematics and who in the past year has graduated from an honours degree program with the highest cumulative average over 80%.
<i>Amount:</i>	1 award of \$250

<b>McLean Scholarships in English [I0188]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Anonymous</b>
<i>Qualification(s):</i>	Students in a B.A. program in English who have completed semester 4 in the previous Spring, Fall or Winter semesters with a high academic standing. A cumulative 80% average in English courses is considered the minimum requirement.
<i>Amount:</i>	2 awards of \$1,000

<b>Michael J.F. Tompkins Scholarship [I0341]</b>	
Offered by his family in memory of Michael Tompkins, Governor General's Medallist 1990. Preference will be given to students who do not hold other Senate awards. The scholarship may be held once only. It is payable after registration in the student's subsequent semester. Essays must be submitted by January 15th to the honours English advisor, together with an application form which is available from the honours English advisor.	
<i>Donor(s):</i>	<b>Donnamarie Tompkins-Grace</b>
<i>Qualification(s):</i>	Student continuing in the honours English degree program at the University of Guelph who submits the best essay written in a 3000 or a 4000 level English Literature course.
<i>Amount:</i>	1 award of \$1,000

<b>Michael Scotchmer Scholarship [I0253]</b>	
Application is by submission of a portfolio of studio work to the Office of the Director of the School of Fine Art and Music by November 1.	
<i>Donor(s):</i>	<b>The Michael Scotchmer Scholarship Committee</b>
<i>Qualification(s):</i>	Fine Art student who is in the intermediate stage of his/her program, i.e. semesters 3 to 6. Applicants must have completed at least 2.50 credits in studio at Guelph, with a 70% average in those courses by the end of the prior Winter semester.
<i>Amount:</i>	1 award of \$1,000

<b>Mordechai Rozanski History Scholarship [I0545]</b>	
Established by the Jean Rich Foundation in recognition of Dr. Rozanski's tenure as president of the University of Guelph from 1993 to 2003. Application not required.	
<i>Donor(s):</i>	<b>Jean Rich Foundation</b>
<i>Qualification(s):</i>	Student in Year 3 ( who has completed a minimum of 10.0 credits up to a maximum of 14.75 credits) of the Honours History program with the highest cumulative average.
<i>Amount:</i>	1 award of \$5,000

<b>Murdo MacKinnon Scholarship [I0169]</b>	
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 not required.	
<i>Donor(s):</i>	<b>The Murdo MacKinnon Scholarship Fund</b>
<i>Qualification(s):</i>	Student(s) registered in an honours major program in the College of Arts in Music, Drama, Art History, Studio Arts, English, History, Philosophy, Languages and Literatures or French Studies with the highest cumulative average in his/her honour subject(s). Preference will be given to students who have done all of their work at the University of Guelph.
<i>Amount:</i>	1 award of \$500

<b>Nancy Stoten Honours Prize in French [I0411]</b>	
Provided by the parents, family and friends of Nancy Stoten, a former student in French Studies. Application not required.	
<i>Donor(s):</i>	<b>The family and friends of Nancy Stoten</b>
<i>Qualification(s):</i>	Students enrolled in the French Studies who has achieved the highest average in the five best courses in French at the 3000 and 4000 level. Recipients of the Nancy Stoten Memorial Scholarship are not eligible for this prize. Students in semesters 7 or 8 or graduating students will be considered for the prize in May.
<i>Amount:</i>	1 award of \$1,000

<b>Nancy Stoten Memorial Scholarship [I0106]</b>	
Provided by the parents, family and friends of Nancy Stoten, a former student in French Studies. Application not required.	
<i>Donor(s):</i>	<b>Mr. Michael and Mrs. Jean Stoten</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

<b>Norma Bowen Memorial Scholarship in Psychology [I0154]</b>	
Apply in writing by July 1 to the Chair of the Psychology Department's Undergraduate Affairs and Curriculum Committee (UACC).	
<i>Donor(s):</i>	<b>The Bowen family, friends and faculty colleagues</b>
<i>Qualification(s):</i>	Presented to a student with an excellent academic record in the first 5 semesters of a Psychology program. Preference will be given to "mature" students.
<i>Amount:</i>	1 award of \$600

<b>O.A.C. '55 Scholarships [I0064]</b>	
Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>O.A.C. '55</b>
<i>Qualification(s):</i>	Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.
<i>Amount:</i>	1 award of \$2,000

<b>O.A.C. Centennial Graduate Fellowships [C0209]</b>	
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 Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Dean, O.A.C.</b>
<i>Qualification(s):</i>	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 are eligible for these fellowships. 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.
<i>Amount:</i>	2 awards of \$2,200

<b>O.A.C. Students' Federation Medal [C0217]</b>	
Application not required.	
<i>Donor(s):</i>	<b>O.A.C.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal

<b>Oxford County Pork Producers Scholarship (Degree) [I0531]</b>	
The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.	
<i>Donor(s):</i>	<b>Oxford County Pork Producers</b>
<i>Qualification(s):</i>	Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.
<i>Amount:</i>	1 award of \$1,000

<b>Oxford University Press Canada Drama Prize [I0177]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Oxford University Press Canada</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Book prize

<b>Printmaking Prize [I0239]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Printmaking students and faculty of the Department of Fine Art</b>
<i>Qualification(s):</i>	Student judged to have made the outstanding academic contribution to the practice of printmaking during that semester. All students currently enrolled in a printmaking course at any level are eligible, provided that they are considered by the Printmaking Selection Committee of the School of Fine Art and Music to have fulfilled all workshop responsibilities.
<i>Amount:</i>	1 award of \$100

<b>Priscilla and Stanford Reid Trust Prize [I0597]</b>	
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.	
<i>Donor(s):</i>	<b>Priscilla and Stanford Reid Trust Fund</b>
<i>Qualification(s):</i>	Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
<i>Amount:</i>	1 award of \$500

<b>Psychology Core and Methodology Scholarship [I0345]</b>	
Provided by the Department of Psychology. Application not required.	
<i>Donor(s):</i>	<b>The Department of Psychology</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$200

<b>Psychology Honours Thesis Prize [I0343]</b>	
Provided by the Department of Psychology. Application not required.	
<i>Donor(s):</i>	<b>The Department of Psychology</b>
<i>Qualification(s):</i>	Student enrolled in the B.A. honours program or the honours specialization in the B.Sc. program majoring in Psychology who has completed PSYC*4870 and PSYC*4880 and who submits the best Psychology honours thesis in the previous Fall, Summer or Winter semesters. The winning thesis is selected from nominations by thesis supervisors.
<i>Amount:</i>	1 award of \$200

<b>Psychology Senior Honours Prize [I0342]</b>	
Provided by the Department of Psychology. Application not required.	
<i>Donor(s):</i>	<b>Department of Psychology</b>
<i>Qualification(s):</i>	Student enrolled in the BA Honours program or the honours specialization in the BSc program majoring in Psychology, having the highest cumulative specialization average after completing at least 15.0 course credits, including those prerequisite courses associated with the honours thesis PSYC*3370. Award may be held once only.
<i>Amount:</i>	1 award of \$200

<b>R.A. Fisher Statistics Scholarship [I0102]</b>	
Established to honour one of the founding fathers of statistics. Awarded in the Fall semester. Not tenable with the Year 3 Statistics Scholarship. Application not required.	
<i>Donor(s):</i>	<b>Faculty, students and other affiliates of the Department of Mathematics and Statistics</b>
<i>Qualification(s):</i>	Student majoring in statistics in year three (i.e. one who has completed a minimum of 10.00 credits up to a maximum of 14.75 credits) who has a cumulative average of at least 80% and the highest grades over 80% in STAT*2040 and STAT*2050 or equivalent. A student may be considered for this award once only.
<i>Amount:</i>	1 award of \$500

<b>R.C. Moffatt Memorial Scholarship in Mathematics or Statistics [I0536]</b>	
This scholarship was established by the Estate of Professor R.C. Moffatt. A student may be considered for this award in both third and fourth years. This award is not tenable with any other Department of Mathematics or Statistics scholarships. Application not required.	
<i>Donor(s):</i>	<b>Estate of Professor R.C. Moffatt</b>
<i>Qualification(s):</i>	Student in year 3 or 4 (i.e., who has completed a minimum of 10.0 credits up to a maximum of 19.75 credits) enrolled as a statistics or mathematics major. The recipient will be selected on the basis of a high cumulative average over 80%.
<i>Amount:</i>	1 award of \$900

<b>Ralph and Edith Kidd Memorial Scholarship in Music [I0463]</b>
Established by the Friends of Music of the University of Guelph in honour of Ralph Kidd, first chairman of the Department of music, and his wife Edith Kidd, who were responsible for establishing the Thursday at Noon concert series in 1968. Application not required.
<i>Donor(s):</i> <b>Friends of Music</b>
<i>Qualification(s):</i> Student 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 15.00 credits and who has the highest average (above 70%) in Music courses.
<i>Amount:</i> 1 award of \$500
<b>Rex Barrell Prize in French [I0393]</b>
Established by University Professor Emeritus Rex A. Barrell. Application not required.
<i>Donor(s):</i> <b>Dr. Rex A. Barrell</b>
<i>Qualification(s):</i> Awarded to the student with the best major essay in FREN*3070, Enlightenment and Crisis in the previous fall or winter semester.
<i>Amount:</i> 1 non-monetary
<b>Ruth and Eber Pollard Award in Canadian History [I0362]</b>
Provided by the Guelph Historical Society in recognition of Ruth and Eber Pollard's contribution as President and Vice-President, respectively, of the Society from 1973 to 1993. Application not required.
<i>Donor(s):</i> <b>The Guelph Historical Society</b>
<i>Qualification(s):</i> The award is for the best essay presented by a student in HIST*4470 or HIST*4970 in Canadian History, particularly its local dimension.
<i>Amount:</i> 1 award of \$1,000
<b>Ruth and Eber Pollard Scholarship in Canadian History [I0576]</b>
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, April 1, 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.
<i>Donor(s):</i> <b>Mr. Eber and Mrs. Ruth Pollard</b>
<i>Qualification(s):</i> Students majoring in History with a minimum cumulative program average of 80% who have completed a minimum of 5.0 course credits.
<i>Amount:</i> 1 award of \$1,000
<b>Samuel and Saidye Bronfman Family Foundation Printmaking Prize [I0035]</b>
Application not required.
<i>Donor(s):</i> <b>From the Samuel and Saidye Bronfman Family Foundation</b>
<i>Qualification(s):</i> Student enrolled in a printmaking course at any level who produces the most outstanding print during the semester. The prize-winning print will become part of the Print Study Collection.
<i>Amount:</i> 3 awards of \$100
<b>Samuel Sidlofsky Scholarship [C0114]</b>
Offered by friends, colleagues, and former students in recognition of the contributions of Professor Samuel Sidlofsky to the University of Guelph Community over 24 years. Application not required.
<i>Donor(s):</i> <b>Friends, colleagues and former students of Professor Samuel Sidlofsky</b>
<i>Qualification(s):</i> Full-time student graduating at the Spring convocation or to a student who has graduated at the previous Winter or Fall convocation in an honours program in the Department of Sociology and Anthropology with the highest aggregate mark in at least 2 courses dealing with prejudice, race, ethnicity, discrimination and/or aging.
<i>Amount:</i> 1 award of \$100
<b>Society of Management Accountants of Ontario Scholarship [C0268]</b>
The scholarship will be awarded at summer convocation. Application not required. One award of \$500 and a free course enrolment in the first complete CMA subject enrolled in the Society's program.
<i>Donor(s):</i> <b>Society of Management Accountants, Grand River Chapter</b>
<i>Qualification(s):</i> Full-time student graduating from B.Comm., B.A. (minor in Business Administration), or B.Sc. (minor in Business Administration), or B.Sc.(Agr.) (major in Agriculture Business or Food Agriculture and Resource Economics), programs. Student with the highest average in the 2 courses Financial Accounting AGE*2220 and Intermediate Accounting AGE*3330.
<i>Amount:</i> 1 award of \$500, and a free course enrolment in the first complete CMA subject enrolled in the Society's program

<b>Spanish Embassy Prizes [C0269]</b>
Application not required.
<i>Donor(s):</i> <b>The Spanish Embassy</b>
<i>Qualification(s):</i> Most outstanding graduating students in Spanish. Academic standing will be used to determine the recipient.
<i>Amount:</i> 2 Book prizes
<b>Statistics Graduation Prize [C0508]</b>
Awarded at Summer Convocation. Application not required. One award of \$250 and a commemorative plaque.
<i>Donor(s):</i> <b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i> The graduating student who has majored in statistics and who in the past year has graduated from an honours degree program with the highest cumulative average over 80%.
<i>Amount:</i> 1 award of \$250, 1 Commemorative plaque
<b>Stephanie Wilken Volunteer Award [I0449]</b>
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.
<i>Donor(s):</i> <b>Bev and Darlene Wilken</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>Swiss Embassy Prizes [C0275]</b>
Offered by the Swiss Consulate. Application not required.
<i>Donor(s):</i> <b>Mr. H.W. Gasser, Swiss Embassy of Ottawa</b>
<i>Qualification(s):</i> Outstanding honour students in French, German and Italian at the end of the 8th semester.
<i>Amount:</i> 3 Book prizes
<b>T.K. Warley Agrifood Policy Prize [I0212]</b>
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 not required.
<i>Donor(s):</i> <b>Professor T.K. Warley</b>
<i>Qualification(s):</i> Student providing the best term paper written on a public policy issue relating to the agrifood system or rural society in courses such as AGE*3030 Price and Production Analysis, AGE*4000 Agricultural and Food Policy, and AGE*4720 Special Study in Food Agriculture and Resource Economics.
<i>Amount:</i> 1 award of \$500
<b>Ted Hadwen Scholarship [C0463]</b>
Application not required.
<i>Donor(s):</i> <b>Department of Sociology and Anthropology</b>
<i>Qualification(s):</i> Student graduating with an honours major in either Sociology or Anthropology whose thesis has been judged to be the best among those completed during the academic year ending with the completion of the Winter semester.
<i>Amount:</i> 1 award of \$100
<b>Ted Newton Memorial Scholarship [I0198]</b>
Established in honour of Professor Ted Newton, the founding chair of the Department of Mathematics and Statistics. Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>Family, friends and colleagues of Dr. T.D. (Ted) Newton</b>
<i>Qualification(s):</i> Student majoring in mathematics or statistics in year 2 (i.e. one who has completed a minimum of 5.0 credits up to a maximum of 9.75 credits) who has the highest average over 80% on a minimum of 4.0 credits in year 1 (i.e., while the first 4.0 to 4.75 credits are in progress. A student may be considered for this award once only.
<i>Amount:</i> 1 award of \$1,500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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 Mathematics and Statistics [I0483]**

Established by Emma Tucker, B.Sc. Statistics, 1996, to encourage women in the study of Mathematics and Statistics. Apply by letter outlining activities and interest in the award to the Department of Mathematics and Statistics main office by April 1.

*Donor(s):* **Emma Tucker, B.Sc.'96**

*Qualification(s):* Female full-time mathematics or statistics major with a minimum cumulative average of 80% and completion of a minimum of 10.00 credits. Preference will be given to a student who has contributed 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.

*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. 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, provided that a minimum of 70% standing is obtained.

*Amount:* 1 award of \$1,000

**Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]**

Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.

*Donor(s):* **Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family**

*Qualification(s):* Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.

*Amount:* 2 awards of \$400

**W.C. Winegard Medal [C0311]**

The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.

*Donor(s):* **The Board of Governors' of the University**

*Qualification(s):* Graduating student who excels both academically and in extracurricular activities.

*Amount:* 1 Gold medal

**W.N. Vaughan Medal [C0299]**

Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.

*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 Medal

**W.S. Reid Essay Prize [I0229]**

In honour of W.S. Reid, Professor Emeritus. Application not required.

*Donor(s):* **Department of History**

*Qualification(s):* Undergraduate student enrolled in the general or honours program in History who has submitted the best essay for a 4000 level course in History.

*Amount:* 1 award of \$200

**W.S. Reid Undergraduate Thesis Prize [I0244]**

In honour of W. S. Reid, Professor Emeritus. Application not required.

*Donor(s):* **Department of History**

*Qualification(s):* Undergraduate student enrolled in the honours History program who submits the best paper for courses HIST\*4470/HIST\*4970 Special History Project Seminar I and II on a non-Canadian topic.

*Amount:* 1 award of \$200

**Wally Fraser Mathematics Scholarship [I0544]**

This scholarship is named in honour of Professor Wally Fraser, a founding member of the Department of Mathematics and Statistics. A student may only be considered for this award once. Awarded in the Fall semester. Application not required.

*Donor(s):* **The Department of Mathematics and Statistics and (retired) Professor Dixon More, C.P.E.S.**

*Qualification(s):* Third year student majoring in mathematics (i.e., one who has completed a minimum of 10.00 credits up to a maximum of 14.75 credits) who has a cumulative average of at least 80%, and the highest average over 80% in a minimum of 4.00 credits in year 2 (i.e, while earning 5.0 to 9.75 credits).

*Amount:* 1 award of \$750

**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.Comm 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 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 \$600

**Waterloo-Wellington CA Association Award [I0367]**

Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.

*Donor(s):* **Waterloo-Wellington Chartered Accountants Association**

*Qualification(s):* Student who achieves the highest academic standing in the course AGEC\*3330, Intermediate Accounting.

*Amount:* 1 award of \$100

<b>Wayne Thompson Prize [C0456]</b>
Established by the Department of Sociology and Anthropology in recognition of the leadership demonstrated by Dr. Wayne Thompson, Chair of the Department from 1978-1990. Application not required.
<i>Donor(s):</i> <b>The Department of Sociology and Anthropology</b>
<i>Qualification(s):</i> Graduating student who has the highest overall cumulative average in an area of concentration in Sociology and Anthropology.
<i>Amount:</i> 1 award of \$100
<b>William Furlong Scholarship in Microeconomics [I0582]</b>
The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON*1050) in the fall semester. Application not required.
<i>Donor(s):</i> <b>Colleagues &amp; Friends of Dr. William Furlong</b>
<i>Qualification(s):</i> Full-time students enrolled in Introductory Microeconomics (ECON*1050)
<i>Amount:</i> 3 awards of \$200
<b>Wilma Hollywood Memorial Scholarship [I0509]</b>
Established by the Department of Psychology, in honour of the late Wilma Hollywood, a long-serving staff member. Application not required.
<i>Donor(s):</i> <b>Department of Psychology</b>
<i>Qualification(s):</i> Student majoring in Psychology in either the B.A. or B.Sc. program who has achieved the highest cumulative average in the core courses.
<i>Amount:</i> 1 award of \$200
<b>Year 3 Mathematics Scholarship [I0506]</b>
Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>The Department of Mathematics and Statistics</b>
<i>Qualification(s):</i> Fourth year student majoring in mathematics (i.e., one who has completed a minimum of 15.00 credits up to a maximum of 19.75 credits) who has a cumulative average of at least 80%, and the highest average over 80% in a minimum of 4.00 credits in year 3 (i.e., while earning 10.0 to 14.75 credits). A student may be considered for this award once only.
<i>Amount:</i> 1 award of \$750
<b>Year 3 Statistics Scholarship [I0507]</b>
Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>The Department of Mathematics and Statistics</b>
<i>Qualification(s):</i> Fourth year student majoring in statistics (i.e., one who has completed a minimum of 15.00 credits up to a maximum of 19.75 credits) who has a cumulative average of at least 80%, and the highest average over 80% in a minimum of 4.00 credits in year 3 (i.e., while earning 10.0 to 14.75 credits). A student may be considered for this award once only.
<i>Amount:</i> 1 award of \$750
<b>In-course Scholarships with Financial Need</b>
<b>3M Canada Scholarships [I0564]</b>
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).
<i>Donor(s):</i> <b>3M Canada Company</b>
<i>Qualification(s):</i> Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i> 2 awards of \$1,000
<b>Alf and Mary Hales Undergraduate Scholarship in Political Science [I4511]</b>
Alf and Mary Hales, with the assistance of the Ontario government's OSOTF program, endowed this annual award. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. ACCESS AWARD.
<i>Donor(s):</i> <b>Alf and Mary Hales</b>
<i>Qualification(s):</i> Students with demonstrated financial need completing their third year of study (semester 6) in an honours major in Political Science. The scholarships will be given to eligible students who have the highest cumulative averages in Political Science courses. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 2 awards of \$1,000

<b>Beatrice Youngman Prize in Music [I4378]</b>
The Guelph Music Club, with the assistance of the Ontario government's OSOTF program, has provided this annual scholarship to honour Beatrice Youngman, a former piano teacher, a volunteer and President of the Club, and a recognized contributor to music and culture within Guelph and the driving force of the Guelph Music Club for over twenty years. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD
<i>Donor(s):</i> <b>The Guelph Music Club</b>
<i>Qualification(s):</i> Student from the B.A. program in honours Music, with demonstrated financial need who has completed the sixth semester with the highest cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 1 award of \$2,000
<b>C.P.E.S. Dean's Scholarship - ACCESS [I4527]</b>
Established by a number of industrial, commercial and public sector corporations, 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. Awarded in the Winter semester. This award may be held once only. ACCESS AWARD
<i>Donor(s):</i> <b>Established by a number of industrial, commercial and public sector corporations</b>
<i>Qualification(s):</i> Students with demonstrated financial need registered in any major program in C.P.E.S. in, or beyond, second year. A minimum 80% cumulative average is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 1 award of \$750
<b>City of Guelph 175th Anniversary Awards [I0515]</b>
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.
<i>Donor(s):</i> <b>The Guelph Community Foundation</b>
<i>Qualification(s):</i> Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i> 1 award of \$1,000
<b>College of Arts Honours Scholarships [I4524]</b>
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. ACCESS AWARD
<i>Donor(s):</i> <b>Numerous Donors</b>
<i>Qualification(s):</i> 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 (see General Statements on Awards).
<i>Amount:</i> 5 awards of \$500
<b>Earl B. MacNaughton C.P.E.S. ACCESS Scholarships [I4172]</b>
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. Awarded in the Winter semester. ACCESS AWARD
<i>Donor(s):</i> <b>Earl B. MacNaughton</b>
<i>Qualification(s):</i> Students currently registered in the final year of an honours program in the College of Physical and Engineering Science 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).
<i>Amount:</i> 2 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **The Family of Eleanor & Bill Archibald**

*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 \$1,000

**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 April 1 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):* A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

*Amount:* 1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Euclid-Hitachi of Canada Ltd.**

*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

**Gerald and Mary Henley Rubio Scholarship [I4534]**

Professors Mary Henley Rubio and the late Gerald Rubio, with the assistance of the Ontario government's OSOTF program, have provided this scholarship to an outstanding student majoring in English. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Professor Mary Henley Rubio**

*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% are eligible to apply. The student with the greatest financial need will be selected. 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 \$1,500

**Gordon Ashton 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), 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **C. Dixon More**

*Qualification(s):* All statistics majors who have completed a minimum of 10.00 credits with a cumulative average of at least 70% and who have demonstrated financial need. Selection is by the College of Physical and Engineering Science Awards Committee, on the recommendation of Student Financial Services, from eligible students assessed as having the 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 \$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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **The Guelph Philosophical Society**

*Qualification(s):* Undergraduate students with a major in Philosophy, in semesters 1 to 4, have a minimum cumulative average of 80% and have demonstrated financial need as determined by Student Financial Services. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Selection is made by the College of Arts Awards Committee on the recommendation of the Department of Philosophy Awards Committee from eligible candidates.

*Amount:* 1 award of \$500

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**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.P.E.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 if applicable, attach a letter stating research interest and involvement. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Mrs. Margaret L. Middleton**

*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 \$500

**Kathleen and R. Douglas Kennedy Scholarship in CSAHS [I0546]**

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.).

*Donor(s):* **Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy**

*Qualification(s):* This scholarship will be awarded to a student in CSAHS with high academic achievement. Preference will be given to students registered in the Department of Family Relations and Applied Nutrition, the School of Hospitality and Tourism Management, or the Department of Marketing and Consumer Studies and to students with demonstrated financial need.

*Amount:* 1 award of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** F. Michael Walsh, BA '69, MA '70, PhD '93 and D. Virginia (Trimble) Walsh, BA '72

**Qualification(s):** Undergraduate B.A. student majoring in Philosophy, with demonstrated financial need, at or beyond semester 5, with a minimum 80% cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Selection is by the College of Arts Awards Committee on the recommendation of the Department of Philosophy Awards Committee and Student Financial Services.

**Amount:** 1 award of \$1,000

**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.).

**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 \$1,000

**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.) ACCESS AWARD

**Donor(s):** Scottish Studies Foundation and private donors

**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

**Studio Arts Specialized Studio Practice Scholarship [I4522]**

Established by supporters of the Studio Art program, with the assistance of the Ontario government's OSOTF program to assist students with financial need to complete Specialized Studio Practice. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. Eligible students will be invited to submit a portfolio to the School of Fine Art and Music. This award may be held once only. Selection will be based on the student's portfolio. ACCESS AWARD

**Donor(s):** Numerous Donors

**Qualification(s):** Studies with demonstrated financial need registered in SART\*4850 Specialized Studio Practice I or SART\*4860 Specialized Studio Practice II. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 1 award of \$400

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

**Donor(s):** The Giuliani Family

**Qualification(s):** Most academically promising applicant with a demonstrated disability and having financial need.

**Amount:** 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

**Qualification(s):** Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

**Amount:** 1 award of \$1,000

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The William and Nona Heaslip Foundation

**Qualification(s):** Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

**Amount:** 2 awards of \$15,000

**Willson Woodside Memorial Scholarship [I4536]**

Established in memory of Willson Woodside, a founding member and former chair of the Department of Political Science, with the assistance of the Ontario government's OSOTF program. Apply with a completed Financial Need Assessment Form (N.A.F.), a covering letter outlining involvement on campus or in the community, and one letter of reference from an individual addressing the applicant's leadership ability to Student Financial Services, by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Department of Political Science

**Qualification(s):** Undergraduate student in Political Science who has completed at least 10.00 credits with 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 \$500

**Yeandle Family In-Course 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. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Awards will be made on the basis of financial need and academic achievement. ACCESS AWARD

**Donor(s):** The Estate of Audrey Yeandle

**Qualification(s):** Full-time undergraduate students registered in each of the eight academic units and CIDS within the College of Social and Applied Human Sciences. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Awards will be made on the basis of financial need and academic achievement.

**Amount:** Several awards up to \$2,000

**In-course Awards with Financial Need****Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

**Donor(s):** University of Guelph

**Qualification(s):** Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

**Amount:** 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of '72: 25th Reunion**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1933 (in honour of the late Prof. W.J. Squirrell)**

*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:* 3 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1936**

*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:* 2 awards of \$500

**Credit Valley Conservation Authority Foundation Bursary [I3007]**

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

*Donor(s):* **Credit Valley Conservation Authority Foundation**

*Qualification(s):* Full-time student registered in B.A. Geography, B.Sc. Geographic Information Systems and Environmental Analysis, B.Sc. Engineering (Water Resource Engineering), B.Sc.(Agr.) Agroecosystem Management or B.Sc.(Env.) Geography majors with demonstrated financial need. Preference will be given to a student who resides in a member municipality of the Credit Valley Authority Foundation.

*Amount:* 1 award of \$500

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Mrs Deborah Leach-Sartor**

*Qualification(s):* O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and 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:* 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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

*Donor(s):* **Mrs. Elizabeth Burton**

*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 up to \$2000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Established by the Miles Family**

*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 \$1,500

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Gryphon Investment Council Inc.**

*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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

*Donor(s):* **Student Health and Dental Plan Reserve**

*Qualification(s):* All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

*Amount:* Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

*Donor(s):* **Undergraduate Students**

*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 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. Awarded in the Winter semester.

**Donor(s):** Mr. T.K.C. Karr, O.A.C. '32  
**Qualification(s):** O.A.C. students with demonstrated financial need  
**Amount:** Several varies

**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.

**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. Awarded in the Winter semester. 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

**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):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.  
**Amount:** Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

**Donor(s):** Mrs. Norma L. Valeriotte  
**Qualification(s):** Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.  
**Amount:** Several 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. Awarded in the Winter semester.

**Donor(s):** Family and friends of Irvine and Grace B.L.A.ck  
**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

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Estate of Mary I. Whitelock  
**Qualification(s):** All undergraduate, graduate or O.A.C. diploma 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

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '38 Alumni  
**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
**Amount:** 7 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD.

**Donor(s):** O.A.C. Class of '55  
**Qualification(s):** Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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 \$500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '57 and the O.A.C. Alumni Foundation  
**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:** 5 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Foundation  
**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:** 4 awards of \$500

**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. Awarded in the Winter semester.

**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 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. Awarded in the Winter semester.

**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]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

**Donor(s):** Office of Registrarial Services

**Qualification(s):** Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

**Amount:** Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Association

**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:** 3 awards of \$500

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The University Police**

*Qualification(s):* Full-time undergraduate and graduate students who have financial need.

*Amount:* Several of various amounts

**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. Typically, awarded in the Winter semester.

*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

**In-course Travel Grants****A.W. Archibald Memorial Travel Grant [T4541]**

Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.

*Donor(s):* **A.W. Archibald, O.A.C. '33**

*Qualification(s):* Undergraduate students in any O.A.C. 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 up to \$1000

**Aeroplan International Travel Grant [T0604]**

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

*Donor(s):* **Aeroplan**

*Qualification(s):* Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

*Amount:* 1 plane ticket per each semester

**Arthur D. Latonnell Undergraduate Travel Grants [T0058]**

An endowment fund established in memory of Arthur D. Latonnell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

*Donor(s):* **The Estate of Arthur D. Latonnell**

*Qualification(s):* Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

*Amount:* several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

*Donor(s):* **Canadian Friends of the Hebrew University in Jerusalem**

*Qualification(s):* Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 3 Awards with varying amounts

**D & G Hart Travel Grant [T0601]**

Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.

*Donor(s):* **Family of Douglas and George Hart**

*Qualification(s):* Students currently enrolled in any O.A.C. program with a minimum 70% cumulative average who intend to participate in travel related to course study.

*Amount:* 1 award of up to awards of \$1,000

**Geography Field Trip Travel Grant [T0584]**

In honour of the retirement of Dr. G.T. Bloomfield, former faculty member and Chair of the department of Geography from 1977 to 1982. Upon registration for GEOG \*4690, students will submit to the chair of the department a one essay outlining the benefits and expectations of the field course to their career as a geographer and one letter of reference from a geography professor.

*Donor(s):* **Alumni, Colleagues, and Friends of Dr. G.T. Bloomfield**

*Qualification(s):* Full-time students enrolled in the major honours program (B.A.H; B.Sc.(ESS); B.Sc.(Env)) in the Department of Geography who have completed 12.5 course credits and have an overall average of at least 70% at the time of registration for GEOG \*4690

*Amount:* 1 award of \$450

**H.C. Mason Travel Scholarships [T0598]**

In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

*Donor(s):* **Mr. F.W. Bray**

*Qualification(s):* Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study

*Amount:* various awards up to \$1,500

**J. Ross Cavers Study Abroad Scholarship [T0051]**

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

*Donor(s):* **Class of O.A.C. '53**

*Qualification(s):* Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

*Amount:* 3 awards of \$1,800

**J.D. Cunningham Travel Grant [T0605]**

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

**Donor(s):** Ontario Food Protection Association

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

**Amount:** 1 award of \$2,000

**Massey Fund Travel Scholarships [T0417]**

Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.

**Donor(s):** O.A.C. Awards Committee

**Qualification(s):** O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.

**Amount:** 1 award of \$750

**Michael Chepesuik International Travel Grant [T0373]**

Offered in memory of the late Michael W. Chepesuik, O.A.C.'30. Application by letter should be made to the O.A.C. Dean's Office by April 15, and include a description of the study program. Travel grant (or grants). Up to 80% of the actual travel costs associated with the study outside of Canada program will be covered up to a maximum of \$1,000 per student.

**Donor(s):** Mr. Michael W. Chepesuik

**Qualification(s):** Undergraduate or graduate students pursuing studies in Food Agriculture and Resource Economics and who are studying outside of Canada for one or more semesters.

**Amount:** 1 award of \$1,000

**O.A.C. '05 Excellence Travel Grant [T0060]**

In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Class of OAC 1905 and the Class of OAC 2005

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.

**Amount:** 1 award of \$300

**O.A.C. '47 Travel Bursaries [T3505]**

Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD

**Donor(s):** O.A.C. '47

**Qualification(s):** O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of \$600

**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 April 1, 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 \$1,450

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**Robb Travel Grants [T3028]**

These travel grants have been provided in recognition of her love of agriculture, by the estate of Martha Robb, Paris, Ontario. Apply to the Dean, O.A.C. by April 15. Varying amounts (80% of the travel costs will be covered up to \$750 per student).

**Donor(s):** The estate of Martha Robb

**Qualification(s):** O.A.C. students who are attending another university on a Letter of Permission.

**Amount:** Several varies

**Roderick Long International Travel Grant [T0360]**

Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associate with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.

**Donor(s):** Mr. Roderick W. Long

**Qualification(s):** O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters

**Amount:** Several awards of \$1,500

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$1,000

## 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

<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000

<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>John Vanderkamp Memorial Scholarship [E0321]</b>	
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 by June 30 with a letter describing involvement in extra-curricular activities and two reference letters from counsellors, teachers or mentors.	
<i>Donor(s):</i>	<b>Established by the family, friends and colleagues of John Vanderkamp</b>
<i>Qualification(s):</i>	Academically outstanding students entering the B.A.S. program with significant involvement in extra-curricular activities.
<i>Amount:</i>	1 award of \$500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000
<b>McArthur-Humphries Scholarship [E0183]</b>	
Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Wilhelmina McArthur-Humphries Trust Fund</b>
<i>Qualification(s):</i>	Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.
<i>Amount:</i>	12 awards of \$1,000
<b>P.A.J. Clarke Family Scholarship [E0381]</b>	
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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Paul and Aileen Clarke</b>
<i>Qualification(s):</i>	Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.
<i>Amount:</i>	1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

<b>Donor(s):</b>	<b>A number of President's Scholarships have been named in honour of the following people and/or donors:</b> <b>Dick Brown</b> Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988. <b>Cecil H. Franklin and Ingrid Franklin</b> 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. <b>Charles S. Humphrey</b> 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. <b>Jack R. Longstaffe</b> 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. <b>Burton C. Matthews</b> 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. <b>Kathleen and Frederick Metcalf</b> 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). <b>Rol-land Farms Limited</b> 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. <b>Lillian Stewart Usher</b> 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.
<b>Qualification(s):</b>	Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.
<b>Amount:</b>	12 awards of \$26,000

**The 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 persons. Apply by letter to Student Financial Services by April 1.

<b>Donor(s):</b>	<b>Jack and Lillian MacDonald</b>
<b>Qualification(s):</b>	In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.
<b>Amount:</b>	1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

<b>Donor(s):</b>	<b>University of Guelph</b>
<b>Qualification(s):</b>	Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.
<b>Amount:</b>	Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

<b>Donor(s):</b>	<b>University of Guelph Faculty Association</b>
<b>Qualification(s):</b>	Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.
<b>Amount:</b>	1 award of \$2,250

**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 not required.

<b>Donor(s):</b>	<b>Prof. Rosalina Morris</b>
<b>Qualification(s):</b>	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.
<b>Amount:</b>	1 award of \$1,000

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

<b>Donor(s):</b>	<b>Ross and Mary Lou Klopp</b>
<b>Qualification(s):</b>	Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.
<b>Amount:</b>	1 award of \$500

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

<b>Donor(s):</b>	<b>University of Guelph</b>
<b>Qualification(s):</b>	Students entering a full-time undergraduate program on the basis of financial need and academic merit.
<b>Amount:</b>	500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

**Donor(s):** Rol-Land Farms

**Qualification(s):** Outstanding entering undergraduate degree students 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

**Amount:** 150 awards of \$9,000

**Entrance Awards with Financial Need****Harvey Graham Bursary [E3030]**

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

**Donor(s):** Harvey Graham, O.A.C. '39

**Qualification(s):** Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

**Amount:** 1 award of \$1,700

**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. Students who have applied to the University of Guelph will receive an application form.

**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 of \$1,000, Several awards of \$3,000

**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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

**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:** 12 awards of \$500

**In-course Scholarships****Bill Taylor Memorial Scholarship [I0280]**

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.

**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

**Certified General Accountants Award for Excellence Prize [C0025]**

Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.

**Donor(s):** Certified General Accountants Association of Ontario

**Qualification(s):** Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGECE\*2220; Management Accounting AGECE\*2230; and Intermediate Accounting AGECE\*3330.

**Amount:** 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

**CFRU Volunteer Award [I0215]**

Apply to the CFRU Board of Governors by April 30.

**Donor(s):** Station Manager, CFRU

**Qualification(s):** Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.

**Amount:** 2 awards of \$250

**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 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 Award [I0040]**

Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.

**Donor(s):** Collins Barrow Chartered Accountants

**Qualification(s):** Student with the highest grade in course AGECE\*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.

**Amount:** 1 award of \$500

**David F. Boyes Apiculture Scholarship [I0031]**

Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application 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 \$150

**Deans' Scholarships [I0323]**

Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.

**Donor(s):** Board of Governors

**Qualification(s):** Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.

**Amount:** 150 awards of \$1,000

**Evelyn Matheson Pepper Memorial Scholarship [I0538]**

The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.

**Donor(s):** Ms. Barbara Stuart and Ms. Susan Pepper

**Qualification(s):** Student who achieves the highest grade in the course FRHD\*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.

**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. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

**Donor(s):** Mrs. George A. Gray

**Qualification(s):** Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.

**Amount:** 2 awards of \$1,250

**Governor General's Medal [C0044]**

Established by the Office of the Governor General of Canada. Application 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:** 1 Silver medal

**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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

**Donor(s):** International Student Organization (ISO)

**Qualification(s):** Full-time International 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 75%, and is registered at the time of application.

**Amount:** 1 award of \$1,000

**John Eccles Scholarship [I0093]**

Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.

**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 \$600

**Kenneth W. Hammond Award [I0045]**

The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.

**Donor(s):** Kenneth W. Hammond

**Qualification(s):** Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.

**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 the end of the 12th week of the Winter semester.

**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 LGBT Studies [I0591]**

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LGBT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LGBT peoples. Preference will be given to an applicant who is involved in the LGBT 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 LGBT 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 (LGBT) 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.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Conolly

**Qualification(s):** Full-time visiting exchange undergraduate or graduate 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). 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.

**Amount:** 1 award of \$1,000

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

**Donor(s):** TBA

**Qualification(s):** The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

**Amount:** 3 awards of \$250

**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

**Stephanie Wilken Volunteer Award [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 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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.

*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. 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, provided that a minimum of 70% standing is obtained.

*Amount:* 1 award of \$1,000

**Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]**

Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.

*Donor(s):* **Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family**

*Qualification(s):* Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.

*Amount:* 2 awards of \$400

**W.C. Winegard Medal [C0311]**

The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.

*Donor(s):* **The Board of Governors' of the University**

*Qualification(s):* Graduating student who excels both academically and in extracurricular activities.

*Amount:* 1 Gold medal

**W.N. Vaughan Medal [C0299]**

Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.

*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 Medal

**Waterloo-Wellington CA Association Award [I0367]**

Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.

*Donor(s):* **Waterloo-Wellington Chartered Accountants Association**

*Qualification(s):* Student who achieves the highest academic standing in the course AGE\*3330, Intermediate Accounting.

*Amount:* 1 award of \$100

**William Furlong Scholarship in Microeconomics [I0582]**

The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON\*1050) in the fall semester. Application not required.

*Donor(s):* **Colleagues & Friends of Dr. William Furlong**

*Qualification(s):* Full-time students enrolled in Introductory Microeconomics (ECON\*1050)

*Amount:* 3 awards of \$200

**In-course Scholarships with Financial Need****3M Canada Scholarships [I0564]**

Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).

*Donor(s):* **3M Canada Company**

*Qualification(s):* Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.

*Amount:* 2 awards of \$1,000

**City of Guelph 175th Anniversary Awards [I0515]**

Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.

*Donor(s):* **The Guelph Community Foundation**

*Qualification(s):* Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.

*Amount:* 1 award of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **The Family of Eleanor & Bill Archibald**

*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 \$1,000

**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 April 1 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):* A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

*Amount:* 1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Euclid-Hitachi of Canada Ltd.**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

*Donor(s):* **The Giuliani Family**

*Qualification(s):* Most academically promising applicant with a demonstrated disability and having financial need.

*Amount:* 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

*Donor(s):* **University of Guelph Retirees Association (U.G.R.A.)**

*Qualification(s):* Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

*Amount:* 1 award of \$1,000

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The William and Nona Heaslip Foundation**

*Qualification(s):* Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

*Amount:* 2 awards of \$15,000

**In-course Awards with Financial Need****Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

*Donor(s):* **University of Guelph**

*Qualification(s):* Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

*Amount:* 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

<b>Class of '72: 25th Reunion Bursaries [I3512]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of '72: 25th Reunion</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$1,000
<b>Elizabeth Burton Bursaries [I3503]</b>	
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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.	
<i>Donor(s):</i>	<b>Mrs. Elizabeth Burton</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of up to \$2000
<b>Gryphon Investment Council Bursaries [I3513]</b>	
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Gryphon Investment Council Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Guelph Compassionate Health Bursary [I3061]</b>	
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.	
<i>Donor(s):</i>	<b>Student Health and Dental Plan Reserve</b>
<i>Qualification(s):</i>	All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.
<i>Amount:</i>	Several varies to a maximum \$1,500
<b>Guelph Student Assistance Program [I3056]</b>	
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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Undergraduate Students</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of varying amounts up to \$1,000
<b>Helen Mahon Memorial Bursary [I3063]</b>	
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.	
<i>Donor(s):</i>	<b>Family and Friends of Helen Mahon</b>
<i>Qualification(s):</i>	Students registered in any program who come from a family where one parent is deceased.
<i>Amount:</i>	1 award of \$500

<b>Howard and Myrtle Rogers Bursaries [I3537]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Estate of Howard and Myrtle Rogers</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	10 up to \$2,000
<b>International Emergency Medical Aid Assistance [I3059]</b>	
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.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several awards of varying amounts
<b>International Student Bursaries [I3009]</b>	
Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.	
<i>Donor(s):</i>	<b>Mrs. Norma L. Valeriotte</b>
<i>Qualification(s):</i>	Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.
<i>Amount:</i>	Several of varying amounts
<b>Irvine and Grace Black Memorial Bursary [I3051]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Family and friends of Irvine and Grace B.L.A.ck</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>Mary I. Whitelock Bursaries [I3524]</b>	
Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Estate of Mary I. Whitelock</b>
<i>Qualification(s):</i>	All undergraduate, graduate or O.A.C. diploma students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	13 awards of \$2,000
<b>Ontario Co-operatives R.P. Forshaw Bursary [I3013]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$400

**Robert Auger Humanitarian Bursary [I3058]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

**Donor(s):** Office of Registrarial Services

**Qualification(s):** Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

**Amount:** Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The University Police

**Qualification(s):** Full-time undergraduate and graduate students who have financial need.

**Amount:** Several of various amounts

**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. Typically, awarded in the Winter semester.

**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

**In-course Travel Grants****Aeroplan International Travel Grant [T0604]**

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

**Donor(s):** Aeroplan

**Qualification(s):** Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

**Amount:** 1 plane ticket per each semester

**Arthur D. Latornell Undergraduate Travel Grants [T0058]**

An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latornell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$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

<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000

<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000
<b>McArthur-Humphries Scholarship [E0183]</b>	
Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Wilhelmina McArthur-Humphries Trust Fund</b>
<i>Qualification(s):</i>	Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.
<i>Amount:</i>	12 awards of \$1,000
<b>O.A.C. '49 Bachelor of Bio-Resource Management Entrance Scholarships [E0585]</b>	
This award has been established to support the Bachelor of Bio-Resource Management program. Students should apply by April 1, to Student Financial Services by letter outlining career aspirations, extracurricular and community involvement in agri-food related activities.	
<i>Donor(s):</i>	<b>Class of O.A.C. '49 O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i>	Students entering the first semester of the BBRM program with a minimum 75% admission average.
<i>Amount:</i>	2 awards 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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

**Donor(s):** Mrs. Helen Quinn (O.A.C. '35)

**Qualification(s):** Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

**Amount:** 1 award of \$1,500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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

## Entrance Scholarships with Financial Need

### Bill Klopp Memorial Award [E0150]

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

*Donor(s):* **Ross and Mary Lou Klopp**

*Qualification(s):* Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

*Amount:* 1 award of \$500

### Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic merit.

*Amount:* 500 awards of \$2,000

### 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 (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 May 1. ACCESS AWARD

*Donor(s):* **Rol-Land Farms**

*Qualification(s):* Outstanding entering undergraduate degree students 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

### University of Guelph Accessibility Scholarship [E3038]

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

*Amount:* 150 awards of \$9,000

## Entrance Awards with Financial Need

### 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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).

*Donor(s):* **W. Roy Hindle and family**

*Qualification(s):* An entering O.A.C. degree student who has 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

### Harvey Graham Bursary [E3030]

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

### 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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

### 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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

## In-course Scholarships

### Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.

*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

<b>Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]</b>
Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards Committee by April 1 with a summary of participation in the Ag Ec & Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member.
<i>Donor(s):</i> <b>Canadian Agri-Marketing Association (Ontario)</b>
<i>Qualification(s):</i> Student who has competed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec & Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing.
<i>Amount:</i> 1 award of \$1,500
<b>Certified General Accountants Award for Excellence Prize [C0025]</b>
Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.
<i>Donor(s):</i> <b>Certified General Accountants Association of Ontario</b>
<i>Qualification(s):</i> Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGECE*2220; Management Accounting AGECE*2230; and Intermediate Accounting AGECE*3330.
<i>Amount:</i> 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)
<b>CFRU Volunteer Award [I0215]</b>
Apply to the CFRU Board of Governors by April 30.
<i>Donor(s):</i> <b>Station Manager, CFRU</b>
<i>Qualification(s):</i> Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.
<i>Amount:</i> 2 awards of \$250
<b>Class of 1970 Scholarship [I0424]</b>
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 not required.
<i>Donor(s):</i> <b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,400
<b>Collins Barrow Award [I0040]</b>
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.
<i>Donor(s):</i> <b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i> Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i> 1 award of \$500
<b>David F. Boyes Apiculture Scholarship [I0031]</b>
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.
<i>Donor(s):</i> <b>The Apiculture Club</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$150
<b>Deans' Scholarships [I0323]</b>
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.
<i>Donor(s):</i> <b>Board of Governors</b>
<i>Qualification(s):</i> Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i> 150 awards of \$1,000

<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.
<i>Donor(s):</i> <b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i> Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i> 1 award of \$1,000
<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.
<i>Donor(s):</i> <b>Mrs. George A. Gray</b>
<i>Qualification(s):</i> Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i> 2 awards of \$1,250
<b>Governor General's Medal [C0044]</b>
Established by the Office of the Governor General of Canada. Application not required.
<i>Donor(s):</i> <b>The Chancellor</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Silver medal
<b>International Undergraduate Scholarship [I0577]</b>
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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.
<i>Donor(s):</i> <b>International Student Organization (ISO)</b>
<i>Qualification(s):</i> Full-time International 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 75%, and is registered at the time of application.
<i>Amount:</i> 1 award of \$1,000
<b>Joerg and Franzis Leiss Horticultural Scholarship [I0565]</b>
Provided by Mr. Joerg Leiss, O.A.C. '63. Selection will be based on the highest cumulative average (of at least 75%) in the horticultural (HORT) courses normally taken in year 1 and 2. Application not required.
<i>Donor(s):</i> <b>Mr. Joerg Leiss, O.A.C. '63</b>
<i>Qualification(s):</i> Students who have completed at least 10.0 credits and are currently registered in the Bachelor of Bio-Resource Management, or in the Bachelor of Science in Agriculture with a major in Horticultural Science programs.
<i>Amount:</i> 1 award of \$2,000
<b>John Eccles Scholarship [I0093]</b>
Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Student Housing Services</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$600

<b>Kenneth W. Hammond Award [I0045]</b>	
The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.	
<i>Donor(s):</i>	<b>Kenneth W. Hammond</b>
<i>Qualification(s):</i>	Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.
<i>Amount:</i>	1 award of \$1,000

<b>Kip Hunter Prize [I0139]</b>	
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 the end of the 12th week of the Winter semester.	
<i>Donor(s):</i>	<b>Faculty, students and staff of the Philosophy Department</b>
<i>Qualification(s):</i>	Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
<i>Amount:</i>	1 Book prize

<b>Lambda Foundation Scholarship in LGBT Studies [I0591]</b>	
This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LGBT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LGBT peoples. Preference will be given to an applicant who is involved in the LGBT 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 LGBT community and/or faculty support.	
<i>Donor(s):</i>	<b>Lambda Foundation and other donors</b>
<i>Qualification(s):</i>	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 (LGBT) studies, as broadly defined by the applicant.
<i>Amount:</i>	1 award of \$1,000

<b>Marion McKenzie Prizes for Outstanding Achievement in History [I0470]</b>	
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*1010, HIST*2450, HIST*2602). Application not required.	
<i>Donor(s):</i>	<b>TBA</b>
<i>Qualification(s):</i>	The recipient for HIST*1010 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST*2602, no more than 10.0 credits.
<i>Amount:</i>	3 awards of \$250

<b>O.A.C. Students' Federation Medal [C0217]</b>	
Application not required.	
<i>Donor(s):</i>	<b>O.A.C.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal

<b>Oxford County Pork Producers Scholarship (Degree) [I0531]</b>	
The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.	
<i>Donor(s):</i>	<b>Oxford County Pork Producers</b>
<i>Qualification(s):</i>	Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.
<i>Amount:</i>	1 award of \$1,000

<b>Priscilla and Stanford Reid Trust Prize [I0597]</b>	
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.	
<i>Donor(s):</i>	<b>Priscilla and Stanford Reid Trust Fund</b>
<i>Qualification(s):</i>	Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
<i>Amount:</i>	1 award of \$500

<b>Stephanie Wilken Volunteer Award [I0449]</b>	
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.	
<i>Donor(s):</i>	<b>Bev and Darlene Wilken</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

<b>The Jack and Lillian MacDonald Scholarship [E0379]</b>	
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 persons. Apply by letter to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Jack and Lillian MacDonald</b>
<i>Qualification(s):</i>	In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.
<i>Amount:</i>	1 award of \$900

<b>Thomas H. Peters Scholarship [I0233]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Friends and associates of Thomas H. Peters</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$250

<b>Toronto District Beekeeper's Association Scholarship [I0285]</b>	
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application not required.	
<i>Donor(s):</i>	<b>Mr. Jack Robinson</b>
<i>Qualification(s):</i>	The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
<i>Amount:</i>	1 award of \$500

<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000

<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400
<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal
<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal
<b>In-course Scholarships with Financial Need</b>	
<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000
<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000

<b>Erin Demers Memorial Scholarship [I0406]</b>	
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 April 1 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.	
<i>Donor(s):</i>	<b>Family and friends of Erin Katrina Demers</b>
<i>Qualification(s):</i>	A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.
<i>Amount:</i>	1 award of \$2,000
<b>Euclid-Hitachi Scholarships [I4517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Euclid-Hitachi of Canada Ltd.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Graham Family Incentive Scholarship [I4506]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Harvey Graham O.A.C. '39</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$5,000
<b>Guelph Varsity Athletic Accessibility Scholarship [I0518]</b>	
Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<i>Donor(s):</i>	<b>Alumni and friends of the University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.
<i>Amount:</i>	2 awards of \$1,250
<b>R. Douglas and Kathleen Kennedy Scholarship in O.A.C. [I0547]</b>	
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.).	
<i>Donor(s):</i>	<b>Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy</b>
<i>Qualification(s):</i>	This scholarship will be awarded to a student in O.A.C. with high academic achievement and demonstrated financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Tara Lynn Giuliani Memorial Award [I0375]</b>	
In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.	
<i>Donor(s):</i>	<b>The Giuliani Family</b>
<i>Qualification(s):</i>	Most academically promising applicant with a demonstrated disability and having financial need.
<i>Amount:</i>	1 award of \$500

<b>University of Guelph Retiree Association Degree Scholarship [I0569]</b>	
This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.	
<i>Donor(s):</i>	<b>University of Guelph Retirees Association (U.G.R.A.)</b>
<i>Qualification(s):</i>	Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.
<i>Amount:</i>	1 award of \$1,000

<b>William &amp; Nona Heaslip Scholarship [I0589]</b>	
Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The William and Nona Heaslip Foundation</b>
<i>Qualification(s):</i>	Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.
<i>Amount:</i>	2 awards of \$15,000

### In-course Awards with Financial Need

<b>Bette Stephenson Accessibility Bursary [I3054]</b>	
In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.
<i>Amount:</i>	3 awards to a maximum of \$1,500

<b>Brinson Partners Inc. Bursaries [I3526]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Brinson Partners Inc.</b>
<i>Qualification(s):</i>	Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,500

<b>Burnbrae Farms Bursaries [I3525]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Burnbrae Farms</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Class of '72: 25th Reunion Bursaries [I3512]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of '72: 25th Reunion</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$1,000

<b>Class of O.A.C. '33 Bursaries [I3531]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of 1933 (in honour of the late Prof. W.J. Squirrel)</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$500

<b>Class of O.A.C. '36 Bursaries [I3501]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of 1936</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$500

<b>David R. Leach Memorial Bursary [I3534]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mrs Deborah Leach-Sartor</b>
<i>Qualification(s):</i>	O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$1,000

<b>Elizabeth Burton Bursaries [I3503]</b>	
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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.	
<i>Donor(s):</i>	<b>Mrs. Elizabeth Burton</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of up to \$2000

<b>Gryphon Investment Council Bursaries [I3513]</b>	
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Gryphon Investment Council Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Guelph Compassionate Health Bursary [I3061]</b>	
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.	
<i>Donor(s):</i>	<b>Student Health and Dental Plan Reserve</b>
<i>Qualification(s):</i>	All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.
<i>Amount:</i>	Several varies to a maximum \$1,500

<b>Guelph Student Assistance Program [I3056]</b>
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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.
<i>Donor(s):</i> <b>Undergraduate Students</b>
<i>Qualification(s):</i> 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).
<i>Amount:</i> Several awards of varying amounts up to \$1,000
<b>Gwen Karr Memorial Bursary [I3010]</b>
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. Awarded in the Winter semester.
<i>Donor(s):</i> <b>Mr. T.K.C. Karr, O.A.C. '32</b>
<i>Qualification(s):</i> O.A.C. students with demonstrated financial need
<i>Amount:</i> Several varies
<b>Helen Mahon Memorial Bursary [I3063]</b>
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.
<i>Donor(s):</i> <b>Family and Friends of Helen Mahon</b>
<i>Qualification(s):</i> Students registered in any program who come from a family where one parent is deceased.
<i>Amount:</i> 1 award of \$500
<b>Howard and Myrtle Rogers Bursaries [I3537]</b>
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. Awarded in the Winter semester. ACCESS AWARD
<i>Donor(s):</i> <b>The Estate of Howard and Myrtle Rogers</b>
<i>Qualification(s):</i> 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).
<i>Amount:</i> 10 up to \$2,000
<b>International Emergency Medical Aid Assistance [I3059]</b>
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.
<i>Donor(s):</i> <b>University of Guelph</b>
<i>Qualification(s):</i> Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i> Several awards of varying amounts
<b>International Student Bursaries [I3009]</b>
Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.
<i>Donor(s):</i> <b>Mrs. Norma L. Valeriotte</b>
<i>Qualification(s):</i> Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.
<i>Amount:</i> Several of varying amounts

<b>Irvine and Grace Black Memorial Bursary [I3051]</b>
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. Awarded in the Winter semester.
<i>Donor(s):</i> <b>Family and friends of Irvine and Grace B.L.A.ck</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$500
<b>Mary I. Whitelock Bursaries [I3524]</b>
Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD
<i>Donor(s):</i> <b>Estate of Mary I. Whitelock</b>
<i>Qualification(s):</i> All undergraduate, graduate or O.A.C. diploma students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 13 awards of \$2,000
<b>O.A.C. '38 Lloyd Minshall Bursaries [I3529]</b>
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. Awarded in the Winter semester. ACCESS AWARD
<i>Donor(s):</i> <b>O.A.C. '38 Alumni</b>
<i>Qualification(s):</i> O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 7 awards of \$1,000
<b>O.A.C. '55 Access Bursaries [I3517]</b>
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. Awarded in the Winter semester. ACCESS AWARD.
<i>Donor(s):</i> <b>O.A.C. Class of '55</b>
<i>Qualification(s):</i> Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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).
<i>Amount:</i> Several awards of \$500
<b>O.A.C. '57 Bursaries [I3518]</b>
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. Awarded in the Winter semester. ACCESS AWARD
<i>Donor(s):</i> <b>O.A.C. '57 and the O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i> 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).
<i>Amount:</i> 5 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. Alumni Foundation**

*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:* 4 awards of \$500

**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. Awarded in the Winter semester.

*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 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. Awarded in the Winter semester.

*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]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

*Donor(s):* **Office of Registrarial Services**

*Qualification(s):* Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

*Amount:* Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

*Donor(s):* **Family and Friends of Ron Scriver**

*Qualification(s):* Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Scotiabank**

*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

**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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. Alumni Association**

*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:* 3 awards of \$500

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

*Donor(s):* **Alumni and Friend of the University of Guelph**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **University of Guelph Alumni Association**

*Qualification(s):* Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

*Amount:* Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

*Donor(s):* **University of Guelph**

*Qualification(s):* Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

*Amount:* Several varies

<b>University of Guelph Undergraduate In-Course Bursaries (MET-TR-UG) [I3037]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards ranging in value from \$100 to \$3,000

<b>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [I3047]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards to a maximum of \$800

<b>University Police Bursaries [I3019]</b>	
The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The University Police</b>
<i>Qualification(s):</i>	Full-time undergraduate and graduate students who have financial need.
<i>Amount:</i>	Several of various amounts

<b>University Student Assistance Program [I3057]</b>	
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. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of various amounts to a maximum of \$1,000

## In-course Travel Grants

<b>A.W. Archibald Memorial Travel Grant [T4541]</b>	
Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.	
<i>Donor(s):</i>	<b>A.W. Archibald, O.A.C. '33</b>
<i>Qualification(s):</i>	Undergraduate students in any O.A.C. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	Several up to \$1000

<b>Aeroplan International Travel Grant [T0604]</b>	
Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.	
<i>Donor(s):</i>	<b>Aeroplan</b>
<i>Qualification(s):</i>	Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.
<i>Amount:</i>	1 plane ticket per each semester

<b>Arthur D. Latornell Undergraduate Travel Grants [T0058]</b>	
An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.	
<i>Donor(s):</i>	<b>The Estate of Arthur D. Latornell</b>
<i>Qualification(s):</i>	Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.
<i>Amount:</i>	several up to a maximum of \$1000

<b>Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]</b>	
The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.	
<i>Donor(s):</i>	<b>Canadian Friends of the Hebrew University in Jerusalem</b>
<i>Qualification(s):</i>	Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	3 Awards with varying amounts

<b>D &amp; G Hart Travel Grant [T0601]</b>	
Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.	
<i>Donor(s):</i>	<b>Family of Douglas and George Hart</b>
<i>Qualification(s):</i>	Students currently enrolled in any O.A.C. program with a minimum 70% cumulative average who intend to participate in travel related to course study.
<i>Amount:</i>	1 award of up to awards of \$1,000

<b>H.C. Mason Travel Scholarships [T0598]</b>	
In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.	
<i>Donor(s):</i>	<b>Mr. F.W. Bray</b>
<i>Qualification(s):</i>	Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study
<i>Amount:</i>	various awards up to \$1,500

**J. Ross Cavers Study Abroad Scholarship [T0051]**

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

**Donor(s):** Class of O.A.C. '53

**Qualification(s):** Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

**Amount:** 3 awards of \$1,800

**J.D. Cunningham Travel Grant [T0605]**

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

**Donor(s):** Ontario Food Protection Association

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

**Amount:** 1 award of \$2,000

**Massey Fund Travel Scholarships [T0417]**

Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.

**Donor(s):** O.A.C. Awards Committee

**Qualification(s):** O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.

**Amount:** 1 award of \$750

**O.A.C. '05 Excellence Travel Grant [T0060]**

In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Class of OAC 1905 and the Class of OAC 2005

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.

**Amount:** 1 award of \$300

**O.A.C. '47 Travel Bursaries [T3505]**

Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD

**Donor(s):** O.A.C. '47

**Qualification(s):** O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of \$600

**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 April 1, 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 \$1,450

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**Roderick Long International Travel Grant [T0360]**

Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associate with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.

**Donor(s):** Mr. Roderick W. Long

**Qualification(s):** O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters

**Amount:** Several awards of \$1,500

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$1,000

## 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

<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Clara E. Elliott Entrance Scholarships [E0095]</b>	
Provided by the estate of Clara E. Elliott, MAC '07. This scholarship is payable in 4 annual installments of \$2,000. To maintain the award for the second year of study, the recipients must have at least a 77% average and continue to demonstrate the qualities on which the award was given. To maintain the scholarship into the 3rd and 4th years, the recipient must have at least an 80% average in the prior year and continue to demonstrate the qualities on which the award was given. Eligible students admitted to semester 1 will be invited to submit an application. One award of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Clara E. Elliott Estate</b>
<i>Qualification(s):</i>	Students entering semester 1 of the B.A.Sc. program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program with at least an 80% entrance average. The recipient will be selected on the basis of academic achievement and evidence of participation in leadership roles as indicated by their application material and reference letters from teachers.
<i>Amount:</i>	1 award of \$8,000

<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>James MacMillan Memorial Scholarship [I0494]</b>	
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7.	
<i>Donor(s):</i>	<b>Austin Conway</b>
<i>Qualification(s):</i>	Kemptville College graduate with high academic standing (a minimum 75% cumulative average) who registers in the O.A.C. degree program in Agriculture or in Agriculture and Business. Financial need may also be considered.
<i>Amount:</i>	1 award of \$2,500
<b>L.A. Beattie &amp; J.C. Beattie Memorial Scholarship [E0026]</b>	
The estate of Jessie L. Beattie has established a scholarship in memory of Lillie Ann Beattie and Jeannie Cockburn Beattie. The scholarship is awarded alternately between the B.A.Sc. (odd-numbered years) and B.Comm. (even-numbered years) programs. Application not required.	
<i>Donor(s):</i>	<b>The estate of Jessie L. Beattie</b>
<i>Qualification(s):</i>	Student entering full-time studies in the B.A.Sc. program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors in the B.Comm. program who has achieved the highest mark in English during the final year of high school. In the event of a tie, preference will be given to students from rural areas.
<i>Amount:</i>	1 award of \$300

**Lincoln Alexander Chancellor's Scholarship [E0493]**

These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour of Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** Many Donors

**Qualification(s):** Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.

**Amount:** 2 awards of \$26,000

**Mac-FACS Alumni Association Centennial Scholarship [E0162]**

Established by the Mac-FACS Alumni Association. The winner will be selected from the pool of eligible students not awarded the Clara E. Elliott Education or Entrance Scholarships.

**Donor(s):** Mac-FACS Alumni Association

**Qualification(s):** This scholarship is offered to students entering the BASc program or the Marketing Management or Housing and Real Estate Management majors of the B.COMM. program with high academic standing and who have shown leadership in community-based volunteer activities. Students who have applied to the above programs will be invited to submit an application.

**Amount:** 1 award of \$500

**Mac-FACS Alumni Entrance Scholarship - Marketing and Consumer Studies [E0521]**

Established in 1960 by the Mac-FACS Alumni Association and awarded in the Fall semester. Application not required.

**Donor(s):** Mac-FACS Alumni Association

**Qualification(s):** Students in the Housing and Real Estate Management or Marketing Management majors of the B.Comm. program. Selection will be based on the highest admission average. This award is not tenable with the President's Scholarship or the Lincoln Alexander Chancellor's Scholarship.

**Amount:** 1 award of \$1,000

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

**Amount:** 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:  
**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

*Donor(s):* **Mrs. Helen Quinn (O.A.C. '35)**

*Qualification(s):* Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

*Amount:* 1 award of \$1,500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

*Amount:* Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

*Donor(s):* **University of Guelph Faculty Association**

*Qualification(s):* Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

*Amount:* 1 award of \$2,250

**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 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

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

*Donor(s):* **Ross and Mary Lou Klopp**

*Qualification(s):* Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

*Amount:* 1 award of \$500

**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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.

*Donor(s):* **The Blount Foundation, Inc.**

*Qualification(s):* Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. 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

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic merit.

*Amount:* 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

*Donor(s):* **Rol-Land Farms**

*Qualification(s):* Outstanding entering undergraduate degree students 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 Physical and Engineering Science (beginning with C.P.E.S. in 2000/2001); one award is available to a B.COMM. students, in a major offered by the School of Hospitality 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 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 May 1. ACCESS AWARD

*Donor(s):* **The Sleeman Brewing & Malting Company**

*Qualification(s):* Full-time entering students registered in the B.Sc. program in the College of Biological Science or the College of Physical and Engineering Science respectively and B.COMM. students, in a major offered by the School of Hospitality and Tourism Management students with a minimum average of 80% in the last year of secondary school 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

*Amount:* 150 awards of \$9,000

**Entrance Awards with Financial Need****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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).

*Donor(s):* **W. Roy Hindle and family**

*Qualification(s):* An entering O.A.C. degree student who has 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

**Gord Bennett Memorial and O.A.C. '43 Class 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 a this bursary. Apply by letter 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). Deadline to submit the online application and letter is May 1. ACCESS AWARD

*Donor(s):* **The family and friends of R. Gordon Bennett, O.A.C. '43**

*Qualification(s):* O.A.C. student with demonstrated financial need entering the Diploma, B.Sc. Agr., or B.Comm., Agricultural Business major, programs. 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

**Harvey Graham Bursary [E3030]**

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

**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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

**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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

**In-course Scholarships****Ann E. Barber Memorial Scholarship [I0023]**

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 CSAHS Undergraduate Awards Committee with a one-page description of contributions to student activities by April 1.

*Donor(s):* **Mac-FACS Alumni Association**

*Qualification(s):* Full-time student in the BASc program or the Marketing Management or Housing and Real Estate Management major of the B.COMM. program who has completed between 5.0 and 10.0 course credits and has achieved a minimum 80% average in the semester just completed. The award will be given to the student who has made the greatest contribution to student activities in residence or on campus.

*Amount:* 1 award of \$500

**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. Apply to the Department of Marketing & Consumer Studies by April 1 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:* 3 awards of \$1,000

<b>Bill Brohman Memorial Scholarship [I0533]</b> <p>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 Associate Dean, Faculty of Management by April 1st, including a statement outlining your extracurricular involvement and interest in pursuing a career in accountancy.</p> <p><i>Donor(s):</i> <b>Robinson Lott &amp; Brohman LLP</b></p> <p><i>Qualification(s):</i> The award will be presented to a student enrolled in any of the majors of the B.Comm. program who have completed 10.0 to 15.0 course credits with a minimum 75% average.</p> <p><i>Amount:</i> 1 award of \$1,500</p>	<b>Cameron Hawkins and Associates Scholarship [I0568]</b> <p>The recipient must have participated in extracurricular activities at the University of Guelph and have a strong interest in the foodservice industry. Apply by January 31 to the HTM Awards Committee using the standard HTM scholarship application form and include a statement of no more than 500 words of interest in the foodservice industry.</p> <p><i>Donor(s):</i> <b>Cameron Hawkins (HAFA '77)</b></p> <p><i>Qualification(s):</i> Students in a major of the B.Comm. program offered by the School of Hospitality and Tourism Management who have completed at least 11.0 credits but no more than 14.5 with a minimum 70% average in the last two full-time equivalent semesters.</p> <p><i>Amount:</i> 1 award of \$500</p>
<b>Bill Taylor Memorial Scholarship [I0280]</b> <p>Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.</p> <p><i>Donor(s):</i> <b>AMF Canada Ltd.</b></p> <p><i>Qualification(s):</i> 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.</p> <p><i>Amount:</i> 1 award of \$900</p>	<b>Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]</b> <p>Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards committee by April 1 with a summary of participation in the Ag Ec &amp; Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member.</p> <p><i>Donor(s):</i> <b>Canadian Agri-Marketing Association (Ontario)</b></p> <p><i>Qualification(s):</i> Student who has competed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec &amp; Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing.</p> <p><i>Amount:</i> 1 award of \$1,500</p>
<b>Blackburn Scholarship [I0404]</b> <p>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 by April 1.</p> <p><i>Donor(s):</i> <b>D.J. Blackburn</b></p> <p><i>Qualification(s):</i> 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.</p> <p><i>Amount:</i> 1 award of \$500</p>	<b>Canadian Association of Agri-Retailers Scholarship [I0444]</b> <p>Provided by the Canadian Association of Agri-Retailers. Apply to Student Financial Services by April 1.</p> <p><i>Donor(s):</i> <b>Canadian Association of Agri-Retailers</b></p> <p><i>Qualification(s):</i> Student who has completed semesters 4, 5, or 6 in B.Sc.(Agr.) or B.Comm., Agricultural Business major, with a minimum 70% average in the previous 2 semesters of full-time equivalent study, participated in extracurricular activities, and has an interest in the input supply industry in agriculture.</p> <p><i>Amount:</i> 1 award of \$1,000</p>
<b>BSI Management Systems Canada Scholarship [I0595]</b> <p>Established for students that are interested in quality management. The recipient will be selected on the basis of high academic standing in Quality Management COST*3010 and demonstrated interests in quality through research or employment in the field of quality management. Apply to the Department of Marketing and Consumer Studies Awards Committee by April 1 with a letter of reference and a 500-word statement documenting the interests in quality.</p> <p><i>Donor(s):</i> <b>BSI Management Systems Canada Inc.</b></p> <p><i>Qualification(s):</i> Students enrolled in a program offered by the Department of Marketing and Consumer Studies and have taken Quality Management COST*3010</p> <p><i>Amount:</i> 1 award of \$1,000</p>	<b>Certified General Accountants Award for Excellence Prize [C0025]</b> <p>Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.</p> <p><i>Donor(s):</i> <b>Certified General Accountants Association of Ontario</b></p> <p><i>Qualification(s):</i> Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGEC*2220; Management Accounting AGEC*2230; and Intermediate Accounting AGEC*3330.</p> <p><i>Amount:</i> 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)</p>
<b>C.M. and D.J. Switzer Scholarships [I0276]</b> <p>Apply by April 1 to Student Financial Services.</p> <p><i>Donor(s):</i> <b>C.M. and D.J. Switzer</b></p> <p><i>Qualification(s):</i> One to a student who has completed semester 2 of the Diploma in Agriculture program and one to a student who has completed semester 4 of a degree program in O.A.C. Recipients will have a minimum of 70% standing and have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.</p> <p><i>Amount:</i> 1 award of \$2,000</p>	<b>CFRU Volunteer Award [I0215]</b> <p>Apply to the CFRU Board of Governors by April 30.</p> <p><i>Donor(s):</i> <b>Station Manager, CFRU</b></p> <p><i>Qualification(s):</i> Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.</p> <p><i>Amount:</i> 2 awards of \$250</p>
<b>C.W. Riley Prize [C0246]</b> <p>The C.W. Riley Prize was established by a number of his friends and associates. Application not required.</p> <p><i>Donor(s):</i> <b>Friends and associates of C.W. Riley</b></p> <p><i>Qualification(s):</i> 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.</p> <p><i>Amount:</i> 1 award of \$375</p>	<b>Charles McGowan Memorial Prize [C0187]</b> <p>Established in memory of the late Lieutenant Charles McGowan. Application not required.</p> <p><i>Donor(s):</i> <b>Charles McGowan Memorial Fund</b></p> <p><i>Qualification(s):</i> Outstanding graduating student in an O.A.C. degree program.</p> <p><i>Amount:</i> 1 award of \$300</p>
	<b>Class of '51 O.A.C. Leadership Awards [C0063]</b> <p>Established by Year '51 O.A.C., on the occasion of its 45th anniversary. At the discretion of the O.A.C. Awards Committee students may be selected before graduation. Application not required.</p> <p><i>Donor(s):</i> <b>Year '51 O.A.C.</b></p> <p><i>Qualification(s):</i> Students graduating from the degree program in a major in an O.A.C. department who have a 70% standing in the final year of study and who have demonstrated leadership in the College or University extracurricular activities.</p> <p><i>Amount:</i> 4 awards of \$1,000</p>

<b>Class of '67 O.A.C. Centennial Scholarship [I0067]</b>
Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Class of O.A.C. '67</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>Class of 1970 Scholarship [I0424]</b>
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 not required.
<i>Donor(s):</i> <b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,400
<b>College of Social Science Alumni Heritage In-Course Scholarships [I0492]</b>
Established in recognition of the valuable contributions made over many years by College of Social Science alumni and the Alumni Association to the life and vitality of the University. Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>College of Social Science Alumni</b>
<i>Qualification(s):</i> Students registered in the C.S.A.H.S. with the highest cumulative program average of at least 80.0% who have completed between 10.00 and 12.50 course credits and who registered in C.S.A.H.S. in the subsequent Fall Semester. One scholarship will be awarded to a full or part-time student registered in a program offered by each of the following six C.S.A.H.S. administrative and academic units: Economics, Geography, International Development Studies, Political Science, Psychology and Sociology and Anthropology. This scholarship may be held once only.
<i>Amount:</i> 6 awards of \$1,000
<b>Collins Barrow Award [I0040]</b>
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.
<i>Donor(s):</i> <b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i> Student with the highest grade in course AGEC*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i> 1 award of \$500
<b>CSAHS Student Volunteer Scholarship [I0482]</b>
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. Applications are available from the CSAHS Dean's Office. Apply to the CSAHS Dean's Office with a completed application form, 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, and 2 letters of recommendation by April 1. This scholarship will be awarded to the Student Volunteer of the year to help defray the costs associated with volunteerism. One award of \$350 (an equal amount will be awarded to the charitable organization of the recipient's choice).
<i>Donor(s):</i> <b>Harshman Fellowship Society and Pfizer Canada Inc.</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$350
<b>David F. Boyes Apiculture Scholarship [I0031]</b>
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.
<i>Donor(s):</i> <b>The Apiculture Club</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$150

<b>Dawn Morris Memorial Award [C0361]</b>
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. Students are encouraged to submit information on extracurricular activities to Student Financial Services, by April 1.
<i>Donor(s):</i> <b>The Family of Dawn Morris</b>
<i>Qualification(s):</i> Student who is graduating from the Agricultural Business major of the B.Comm. degree or the Food Agriculture and Resource Economics major in the B.Sc.(Agr.) degree with a minimum 'B+' average. Selection will be on the basis of relevant course work in agricultural marketing, extracurricular participation and employment activities.
<i>Amount:</i> 1 award of \$1,500
<b>Deans' Scholarships [I0323]</b>
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.
<i>Donor(s):</i> <b>Board of Governors</b>
<i>Qualification(s):</i> Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i> 150 awards of \$1,000
<b>Dorothy Britton Memorial Scholarship [I0015]</b>
Scholarships are awarded from funds donated from the estate of Dorothy Britton (MAC '39). Awarded on the basis of high academic achievement. Application not required.
<i>Donor(s):</i> <b>The Estate of Dorothy Britton</b>
<i>Qualification(s):</i> Students entering semesters 4 or 5 of the BASc program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program are eligible.
<i>Amount:</i> 6 awards of \$1,500
<b>Dorothy Shantz Memorial Scholarship - Fourth Year [I0256]</b>
Established by the Canadian Hospitality Foundation. Apply to the HTM Awards Committee by January 31 using the standard HTM scholarship application form. Awarded in the Winter semester.
<i>Donor(s):</i> <b>Canadian Hospitality Foundation</b>
<i>Qualification(s):</i> Student registered in a major offered by the School of Hospitality 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 and Tourism Management.
<i>Amount:</i> 1 award of \$1,000, 1 Engraved Plaque
<b>Dorothy Shantz Memorial Scholarship - Third Year [I0496]</b>
Established by the Canadian Hospitality Foundation. Apply to the HTM Awards Committee by January 31 using the standard HTM scholarship application form. Awarded in the Winter semester.
<i>Donor(s):</i> <b>Canadian Hospitality Foundation</b>
<i>Qualification(s):</i> Student registered in a major offered by the School of Hospitality 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 and Tourism Management.
<i>Amount:</i> 1 award of \$1,000, 1 Engraved plaque
<b>Dr. John E. Kean Scholarship [I0447]</b>
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). Dr. Kean received an honorary Doctor of Laws degree from the University of Guelph in 1997. Apply with a letter highlighting interest in management, consumer interests, and/or environmental considerations of Canadian business as well as leadership potential and a completed in-course award application form by April 1 to the Chair of the Department of Marketing & Consumer Studies Awards Committee.
<i>Donor(s):</i> <b>CSA International</b>
<i>Qualification(s):</i> Student with a minimum of 10.0 credits in the Marketing Management major of the B.Comm. program. Preference will be given to a co-op student.
<i>Amount:</i> 1 award of \$500

<b>E.D. Smith Scholarship in Food Service Administration [I0364]</b>
Offered by E.D. Smith and Sons Ltd., a multi-faceted processor of foods. Apply to HTM Awards Committee by January 31 using the standard HTM scholarship application form and include a resume and statement of interest in the foodservice industry.
<i>Donor(s):</i> <b>E.D. Smith &amp; Sons Ltd.</b>
<i>Qualification(s):</i> Student who has demonstrated an interest in the food service industry, has maintained a minimum of 'B' average and has completed 7.00 to 10.50 credits of a major offered by the School of Hospitality and Tourism Management. The scholarship will be awarded on the basis of interest in foodservice operations and academic standing. Interest in the food service industry can be demonstrated by work experience or active membership in the Canadian Association of Foodservice Professionals (CAFP, formerly CFSEA).
<i>Amount:</i> 1 award of \$1,000
<b>Ellen Nilsen Memorial Award [I0047]</b>
Offered by the friends of Ellen Nilsen. Apply to the Director of the Collaborative International Development Studies Programme, Rm 702 MacKinnon Building, by October 7.
<i>Donor(s):</i> <b>The Friends of Ellen Nilsen</b>
<i>Qualification(s):</i> Academically outstanding woman from a developing country who is registered at the University of Guelph in an undergraduate or a graduate program and who has demonstrated a commitment to social change.
<i>Amount:</i> 1 award of \$1,500
<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.
<i>Donor(s):</i> <b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i> Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i> 1 award of \$1,000
<b>Frank Hughes Memorial Scholarship [I0552]</b>
Pannell Kerr Forster (PKF) Consulting Inc. provides this award to a student in the B.Comm program in any major offered by the School of Hospitality and Tourism Management. The winner will be chosen on the basis of three criteria; 1) industry work experience; 2) academic achievement; and 3) extracurricular involvement. Apply to the HTM Awards Committee by January 31st using the standard HTM scholarship application form. Include a resume outlining relevant industry work experience and a detailed list of extracurricular involvement.
<i>Donor(s):</i> <b>Pannell Kerr Forster (PKF) Consulting Inc.</b>
<i>Qualification(s):</i> Full-time student B.Comm program in any major offered by the School of Hospitality and Tourism Management who has completed between 11.0 and 14.5 course credits.
<i>Amount:</i> 1 award of \$1,000
<b>G.H. Mann Food Service Scholarship [I0174]</b>
Preference will be given to a student who has contributed to the on going success of the Hospitality Services Department of the University. Apply to the HTM Awards Committee by January 31 by using the standard HTM scholarship application form and include a statement of up to 500 words explaining interest in the foodservice industry.
<i>Donor(s):</i> <b>G.H. Mann Memorial Fund and M. Mann of Guelph</b>
<i>Qualification(s):</i> Student who is registered in semester 8 of the B.Comm. program, in a major offered by the School of Hospitality 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.
<i>Amount:</i> 1 award of \$300

<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.
<i>Donor(s):</i> <b>Mrs. George A. Gray</b>
<i>Qualification(s):</i> Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i> 2 awards of \$1,250
<b>George D. Bedell Prize [C0352]</b>
The HTM Students Council presents a plaque to a graduating student of the School in honour of George D. Bedell, the first director of the School of Hospitality and Tourism Management. Recipient selected in the Winter semester by the HTM Awards Committee which will conduct an election with the graduating class. Application not required.
<i>Donor(s):</i> <b>The HTM Students' Council</b>
<i>Qualification(s):</i> Student graduating from the B.Comm. program, in a major offered by the School of Hospitality and Tourism Management who, in the minds of his or her fellow students, has demonstrated the outstanding leadership, versatility of interests and involvement in community affairs, both within and outside the School, that exemplifies the sense of professionalism to which the fourth year students have dedicated themselves.
<i>Amount:</i> 1 Plaque
<b>Gerhard Scherf Memorial Scholarship [I0252]</b>
Established by the former College of Family and Consumer Studies Student Association Council (FACS SAC) in memory of Professor Scherf, a former faculty member in the Department of Marketing & Consumer Studies. Apply to the CSAHS Awards Committee by April 1 with a detailed list of extracurricular activities.
<i>Donor(s):</i> <b>FACS Student Administrative Council</b>
<i>Qualification(s):</i> Student who has successfully completed 10.00 credits in the BASc program or a major offered by the School of Hospitality and Tourism Management or the Department of Marketing & Consumer Studies. Applicants must have a minimum average of 70% in the last two full-time semesters and have made an outstanding contribution to the College of Social and Applied Human Sciences. Student must have served for at least one year on the board of directors of the CSAHS Student Alliance or participated in other College activities.
<i>Amount:</i> 1 award of \$200
<b>Gonder Family Centre for Students with Disabilities Volunteer Award [I0563]</b>
In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Centre for Students with Disabilities (CSD) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the CSD. The award will be made on the basis of the volunteer activities undertaken by the student at the CSD, 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 CSD (c/o Advisor to Students with Disabilities) by submitting above documentation.
<i>Donor(s):</i> <b>Dr. John and Mrs. Katherine Gonder</b>
<i>Qualification(s):</i> 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 CSD.
<i>Amount:</i> 1 award of \$900

**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 CSAHS major of the B.Comm. program. Application not required.

**Donor(s):** Dr. John and Mrs. Katherine Gonder

**Qualification(s):** All students in the CSAHS 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 Centre for Students with Disabilities.

**Amount:** 1 award of \$900

**Governor General's Medal [C0044]**

Established by the Office of the Governor General of Canada. Application 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:** 1 Silver medal

**Greater Toronto Hotel Association Scholarship [I0573]**

Each January, the HTM 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 and Tourism Management and have completed HTM\*2100 (Lodging Operations).

**Amount:** 1 award of \$1,000

**HAFA HTM Alumni Association Recognition of Achievement Prize [C0351]**

Established by the School's Alumni Association in recognition of student involvement in the life of the School of Hospitality and Tourism Management and/or the University. Selection will be based on extracurricular activities. Apply by January 31 using the standard HTM scholarship application form with a resume and detailed list of extracurricular activities to the HTM Awards Committee. The recipient will receive this award after graduation.

**Donor(s):** The HAFA HTM Alumni Association

**Qualification(s):** Awarded to a graduating student in a major offered by the School of Hospitality and Tourism Management who has at least a 70% average.

**Amount:** 1 award of \$200 and a framed certificate

**HAFA HTM Alumni Association Scholarship [I0501]**

Established by the School's Alumni Association in recognition of student involvement in the life of School of Hospitality and Tourism Management and/or the University. Apply by January 31 using the standard HTM scholarship application form to the HTM Awards Committee.

**Donor(s):** The HTM Alumni Association

**Qualification(s):** Awarded to students registered in the B.Comm. program, in a major offered by the School of Hospitality 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

**Heimbecker Award in Entrepreneurship [I0388]**

The Heimbecker Award in Entrepreneurship has been established by the friends and associates of Herb Heimbecker, on his retirement as a Director of Goderich Elevators, to honour his contributions to the agrifood industry in Canada. Students should apply to Student Financial Services by April 1, including a resume and a letter highlighting their entrepreneurial skills and their aptitude and interest in business.

**Donor(s):** The friends of Herb Heimbecker at Goderich Elevators

**Qualification(s):** O.A.C. student in B.Sc.(Agr.) or B.Comm., Agribusiness major, who have completed semester 6 are eligible. Students must have a minimum of a B standing (73%-76%) in their previous full-time year or equivalent [5.00] credits, have demonstrated entrepreneurial skills and display an aptitude and an interest in business.

**Amount:** 1 award of \$1,300

**Hotel Human Resource Professionals Association of Greater Metropolitan Toronto Award [I0445]**

Apply by January 31 to the HTM Awards Committee using the standard HTM scholarship application form including a resume and a report on the work experience or project.

**Donor(s):** Hotel Human Resource Professionals of Greater Metropolitan Toronto

**Qualification(s):** Student in the School of Hospitality and Tourism Management who has at least a combined B+ average in the courses Organizational Design and Effectiveness (HTM\*2200) and Human Resource Management (HTM\*3000). As well, the student must have either work experience in the human resource area, or have worked in the hospitality and tourism industry (and have successfully completed a human resource-related project either on the job or in the relevant course work).

**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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

**Donor(s):** International Student Organization (ISO)

**Qualification(s):** Full-time International 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 75%, and is registered at the time of application.

**Amount:** 1 award of \$1,000

**Janet M. Wardlaw Medal [C0096]**

Application not required.

**Donor(s):** Faculty, staff, alumni and students, formerly FACS

**Qualification(s):** Presented to the Winegard Medal nominee selected from candidates from the Department of Marketing & Consumer Studies, the Department of Family Relations and Applied Human Nutrition and the School of Hospitality and Tourism Management.

**Amount:** 1 Medal

**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 letter to the CSAHS Undergraduate Awards Committee, Dean's Office by April 1st, including a statement that outlines the student's experience working with the elderly in a volunteer capacity as well as extracurricular involvement the student may have and two letters of reference, one of which should be from someone who can speak to the student's volunteer experiences with the elderly, while the other should comment on the extracurricular activities of the student.

**Donor(s):** Mr. Robert N. Carter and Family

**Qualification(s):** Undergraduate student in the CSAHS who has completed at least 10.0 credits with a minimum 70% cumulative average and has made a significant contribution to the care of the elderly. Preference will be given to students in the BASc program majoring in Gerontology.

**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 to Student Financial Services by April 1.

**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 \$600

**Joan Doherty Memorial Graduate Scholarship [C0090]**

A scholarship has been established in memory of Joan Doherty, Class of '78, by her family. An application, accompanied by a one-page written statement indicating the student's purpose, goals and objectives in pursuing graduate study, must be submitted to the Marketing & Consumer Studies Awards Committee Awards Committee by February 1.

**Donor(s):** Mr. Thomas B. Doherty

**Qualification(s):** Member of the graduating class in Marketing & Consumer Studies who will be continuing his or her education at the Master's or Doctoral degree level in a Canadian university. The scholarship recipient will be determined on the basis of academic promise as evidenced by undergraduate academic achievement. Should equally qualified students make application for the scholarship, preference will be given to previous winners of the Joan Doherty Memorial Scholarship.

**Amount:** 1 award of \$2,000

**Joan Doherty Memorial Scholarship [I0091]**

The family of Joan Doherty, class of FACS '78, has established this scholarship in her memory. Apply by April 1 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 Housing and Real Estate Management 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 Deere Foundation of Canada Scholarship [I0516]**

Established through the generosity of The John Deere Foundation of Canada to recognize academic excellence. Application not required.

**Donor(s):** The John Deere Foundation of Canada

**Qualification(s):** Student registered in the B.Sc.(Agr.), 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]**

Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.

**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 \$600

**John J. Campbell Memorial Scholarship [I0453]**

Provided by the Food Service Purchasing Association of Canada (FPAC) in memory of John J. Campbell, former President of the Association. Apply by letter describing your interest in foodservice management, along with a Financial Need Assessment Form (N.A.F.), to Student Financial Services by January 31.

**Donor(s):** Food Services Purchasing Association of Canada

**Qualification(s):** Students in the B.Comm. program in a major offered by the School of Hospitality and Tourism Management, with demonstrated financial need, who have completed at least 7.0 credits but no more than 10.5 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 who have (1) an interest in foodservice management and (2) demonstrated financial need. Students must be registered full-time in the (winter) semester during which they receive the award.

**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 Student Financial Services by April 1.

**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 \$750

**Katherine Fuller Scholarship [I0107]**

Established by Macdonald Institute Alumni in 1931 to honour Mrs. Katherine Fuller, the Superintendent of Macdonald Hall from 1904 until her retirement in 1931, and offered by the Mac-FACS Alumni Association. Application not required.

**Donor(s):** Macdonald Institute Alumni Association

**Qualification(s):** Full-time student in the BASc program or the Marketing Management or Housing and Real Estate Management major of the B.COMM. program, who has completed between 5.0 and 10.0 course credits and has demonstrated a high level of academic achievement.

**Amount:** 1 award of \$500

**Kenneth W. Hammond Award [I0045]**

The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.

**Donor(s):** Kenneth W. Hammond

**Qualification(s):** Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.

**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 the end of the 12th week of the Winter semester.

**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

**Leo Lecours Memorial Award [I0542]**

Provided by Lecours Wolfson, a Canadian hospitality management and chef recruitment firm, provides this scholarship in memory of Leo Lecours. Apply to the HTM Awards Committee by January 31, using the standard HTM scholarship application form. Include a 500-word statement on career goals and objectives. The faculty of the School of Hospitality and Tourism Management will also be invited to nominate deserving students and to provide information on the nominees. Nominees will be invited to submit the 500-word statement.

**Donor(s):** Norman Wolfson

**Qualification(s):** Student in the B.Comm. program, in a major offered by the School of Hospitality and Tourism Management, who has made the greatest potential contribution to the School and/or the hospitality industry. Particular attention will be paid to those applicants and nominees who are keenly focused on and enthusiastic about a career in the hospitality industry.

**Amount:** 1 award of \$500

**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.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Connolly

**Qualification(s):** Full-time visiting exchange undergraduate or graduate 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). 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.

**Amount:** 1 award of \$1,000

**Mac '41 Marketing Scholarship [I0214]**

Application not required.

**Donor(s):** Mac '42 c/o Association Director, annual Giving

**Qualification(s):** B.Comm. student registered in the Marketing Management major who has completed the course "Economic Behaviour of Households (MCS\*3100). The recipient of the award will have received the highest grade in MCS\*3100 in the previous year.

**Amount:** 1 award of \$300

**Mac-FACS Alumni Association Scholarship - Marketing and Consumer Studies [I0523]**

Offered by the Mac-FACS Alumni Association. Awarded in the Fall semester. Application not required.

**Donor(s):** Mac-FACS Alumni Association

**Qualification(s):** Full-time student in the Department of Marketing & Consumer Studies who has completed between 5.0 and 10.0 credits with the highest cumulative average above 80%.

**Amount:** 1 award of \$500

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

**Donor(s):** TBA

**Qualification(s):** The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

**Amount:** 3 awards of \$250

**O.A.C. '45 Public Speaking Awards [C0200]**

Offered by the Class of '45 O.A.C., on the occasion of their 40th anniversary. Application not required.

**Donor(s):** Year '45 O.A.C.

**Qualification(s):** Graduating students in the B.Sc.(Agr.) or B.Comm.(Agricultural Business) programs who have demonstrated proficiency in public speaking and communication.

**Amount:** 2 awards of \$1,000

**O.A.C. '55 Scholarships [I0064]**

Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.

**Donor(s):** O.A.C. '55

**Qualification(s):** Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.

**Amount:** 1 award of \$2,000

**O.A.C. Centennial Graduate Fellowships [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 Student Financial Services by April 1.

**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 are eligible for these fellowships. 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:** 2 awards of \$2,200

**O.A.C. Students' Federation Medal [C0217]**

Application 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 Medal

**Ontario Accommodation Association Scholarship [I0594]**

The recipient will be selected based on academic performance and the statement of interest. Apply to the H.T.M. Awards Committee by January 31 by using the standard H.T.M. scholarship application form and include a statement of up to 500 words explaining your interest in the lodging industry.

**Donor(s):** Ontario Accommodation Association

**Qualification(s):** Students in a major of the B.Comm. degree program offered by the School of Hospitality and Tourism Management who have completed at least 11.0 credits but no more than 14.5 credits with a minimum 75% average in the last two full-time equivalent semesters.

**Amount:** 1 award of \$500

**Ontario Agricultural FS Cooperatives Scholarship [I0289]**

The award may be held once only and is awarded to the student that demonstrates leadership abilities and have been involved in extracurricular activities, community services, or agricultural employment. Apply to the O.A.C. Dean's Office by April 1 with a letter of no more than two pages outlining extracurricular activities, community services, or agricultural employment.

**Donor(s):** Growmark, Inc.

**Qualification(s):** Students who have completed 7.5 course credits of the B.Sc.(Agr.) degree or B.Comm. (Agricultural Business) degree with a minimum cumulative average of 70%.

**Amount:** 2 awards of \$800

**Ontario Women's Institute Scholarship [I0160]**

Offered by the Federated Women's Institute of Ontario. Apply to Dean's Office, College of Social and Applied Human Sciences, by April 1.

**Donor(s):** Federated Women's Institutes of Ontario

**Qualification(s):** Students from Ontario with a minimum cumulative average of 70% who have completed 4.00 to 6.00 course credits in either the B.A.Sc. program or the Marketing Management or Housing and Real Estate Management major in the B.Comm program or any of the majors of the B.Comm. offered by the School of Hospitality and Tourism Management 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:** Several awards of \$500

**Oxford County Pork Producers Scholarship (Degree) [I0531]**

The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.

*Donor(s):* **Oxford County Pork Producers**

*Qualification(s):* Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.

*Amount:* 1 award of \$1,000

**Parks Canada and TIAC Sustainable Tourism Scholarship [I0567]**

The recipient must have demonstrated leadership qualities and an entrepreneurial spirit. Preference will be given to a student who has demonstrated a keen interest in sustainable tourism and heritage (natural or cultural). Apply to the HTM Awards Committee, by January 31, using the standard HTM scholarship application form and include a statement of up to 500 words that addresses the criteria of this award.

*Donor(s):* **Tourism Industry Association of Canada (TIAC)**

*Qualification(s):* Students in the Tourism Management major of the B.Comm. program who have completed at least 5.0 credits with a minimum 75% average in the last two full-time equivalent semesters.

*Amount:* 1 award of \$1,000

**PCMA Canada East Chapter Scholarship [I0590]**

Apply using the standard HTM scholarship application to the HTM Awards Committee by January 31 and include a resume and statement of up to 500 words describing involvement in PCMA.

*Donor(s):* **Professional Convention Management Association (PCMA) Canada East Chapter**

*Qualification(s):* Students in a major of the B.Comm. program offered by the School of Hospitality and Tourism Management that has completed at least 10.5 credits with at least a 70% average in the last two full-time equivalent semesters and is involved with the PCMA Student Chapter at the University of Guelph or is a student member of the Canada East Chapter, PCMA Branch.

*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

**Purchasing Management Association of Canada (PMAC) Scholarship [I0458]**

This award has been established to promote the profession of purchasing and to encourage professional development in purchasing management. Apply to the HTM Awards Committee by January 31 using the standard HTM scholarship application form and include a statement of up to 500 words explaining what was learned in the course and how that knowledge was applied to the student's professional or personal life.

*Donor(s):* **Greater Wellington District Purchasing Management Association of Canada**

*Qualification(s):* Student in the B.Comm. program in a major offered by the School of Hospitality and Tourism Management, who obtains a minimum 75% average in the previous winter's offering of HTM\*2000 Hospitality and Tourism Purchasing Management.

*Amount:* 1 award of \$750

**Shirley Louie Memorial Scholarship [I0392]**

Offered by the Canadian College and University Food Services Association (CCUFSA) to honour Shirley Louie, a long-time member. Apply by January 31 using the standard HTM 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 HTM 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 and Tourism Management, with a minimum 70% average and an interest in the foodservice industry.

*Amount:* 1 award of \$250

**Smart Serve Ontario Scholarships [I0550]**

Established by Smart Serve Ontario, a non-profit organization dedicated to promoting the responsible service of alcohol. Application not required.

*Donor(s):* **Smart Serve Ontario**

*Qualification(s):* Students in the B.Comm. program in a major offered by the School of Hospitality 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

**Society of Management Accountants of Ontario Scholarship [C0268]**

The scholarship will be awarded at summer convocation. Application not required. One award of \$500 and a free course enrolment in the first complete CMA subject enrolled in the Society's program.

*Donor(s):* **Society of Management Accountants, Grand River Chapter**

*Qualification(s):* Full-time student graduating from B.Comm., B.A. (minor in Business Administration), or B.Sc. (minor in Business Administration), or B.Sc.(Agr.) (major in Agriculture Business or Food Agriculture and Resource Economics), programs. Student with the highest average in the 2 courses Financial Accounting AGECE\*2220 and Intermediate Accounting AGECE\*3330.

*Amount:* 1 award of \$500, and a free course enrolment in the first complete CMA subject enrolled in the Society's program

**Stephanie Wilken Volunteer Award [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

**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 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 AGECE\*3030 Price and Production Analysis, AGECE\*4000 Agricultural and Food Policy, and AGECE\*4720 Special Study in Food Agriculture and Resource Economics.

*Amount:* 1 award of \$500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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.

*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. 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, provided that a minimum of 70% standing is obtained.

*Amount:* 1 award of \$1,000

**Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]**

Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.

*Donor(s):* **Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family**

*Qualification(s):* Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.

*Amount:* 2 awards of \$400

**W.C. Winegard Medal [C0311]**

The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.

*Donor(s):* **The Board of Governors' of the University**

*Qualification(s):* Graduating student who excels both academically and in extracurricular activities.

*Amount:* 1 Gold medal

**W.N. Vaughan Medal [C0299]**

Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.

*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 Medal

**Walter M. Stewart Scholarships [I0273]**

Established and offered through the W.C. Macdonald Company of Montreal. Application not required.

*Donor(s):* **W.C. Macdonald Company**

*Qualification(s):* Students with the highest cumulative average in the Marketing Management or Housing and Real Estate majors of the B.Comm. program. Marketing and Consumer Studies major who are entering semester level 5, 6 or 7. Students may receive only one Walter M. Stewart Scholarship.

*Amount:* 2 awards of \$400

**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.Comm 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 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 \$600

**Waterloo-Wellington CA Association Award [I0367]**

Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.

*Donor(s):* **Waterloo-Wellington Chartered Accountants Association**

*Qualification(s):* Student who achieves the highest academic standing in the course AGEC\*3330, Intermediate Accounting.

*Amount:* 1 award of \$100

**Westmont Hospitality Group Scholarship [I0126]**

Awarded in the Winter semester. Apply to the HTM Awards Committee by January 31 by using the standard HTM scholarship application form and include a resume and list of extracurricular activities including leadership roles.

*Donor(s):* **Westmont Hospitality Group**

*Qualification(s):* Student registered in the B.Comm program in a major offered by the School of Hospitality and Tourism Management who have completed a minimum of 17.5 credits. Academic achievement and participation in extracurricular activities including leadership roles will also be considered.

*Amount:* 1 award of \$900

**William Furlong Scholarship in Microeconomics [I0582]**

The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON\*1050) in the fall semester. Application not required.

*Donor(s):* **Colleagues & Friends of Dr. William Furlong**

*Qualification(s):* Full-time students enrolled in Introductory Microeconomics (ECON\*1050)

*Amount:* 3 awards of \$200

**In-course Scholarships with Financial Need****3M Canada Scholarships [I0564]**

Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).

*Donor(s):* **3M Canada Company**

*Qualification(s):* Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.

*Amount:* 2 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Canada Bread Limited**

*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 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 OSOTF award (see General Statements on Awards). The scholarships will be awarded based on financial need.

*Amount:* 2 awards of \$1,500

**Cara Operations Scholarships [I4503]**

Provided by Cara operations, 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. Awarded in the Winter semester. ACCESS AWARD.

*Donor(s):* **Cara operations Limited**

*Qualification(s):* Students registered in a major offered by the School of Hospitality 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. Students must be registered full-time in the semester in which the award is received. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). The scholarships will be awarded based on financial need.

*Amount:* 2 awards of \$1,500, 2 awards of \$1,000

**City of Guelph 175th Anniversary Awards [I0515]**

Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.

*Donor(s):* **The Guelph Community Foundation**

*Qualification(s):* Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.

*Amount:* 1 award of \$1,000

**Delta Hotels Limited Scholarship [I4502]**

Provided by Delta Hotels & Resorts 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Delta Hotels Limited**

*Qualification(s):* Students must be enrolled in a major offered by the School of Hospitality and Tourism Management, have completed 8.00 to 12.50 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). The scholarships will be awarded based on financial need. Preference will be given to students who have transferred from a community college.

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **The Family of Eleanor & Bill Archibald**

*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 \$1,000

**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 April 1 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):* A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

*Amount:* 1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Euclid-Hitachi of Canada Ltd.**

*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 [I4537]**

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 cover letter outlining the extent of community volunteerism or involvement in an on-campus student club, particularly as it relates to your area of study. ACCESS AWARD

*Donor(s):* **The Class of FACS '85**

*Qualification(s):* Student enrolled in either the BASc program or the Marketing Management or Housing and Real Estate Management major of the B.COMM. program who has completed at least 10.0 course credits with a minimum 70% cumulative average and has 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 \$500

**Four Seasons Hotels and Resorts ACCESS Scholarship [I4533]**

Established by Four Seasons Hotels and Resorts, 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Four Seasons Hotels Ltd.**

*Qualification(s):* Students registered in the B.Comm. program, in a major offered by the School of Hospitality and Tourism Management, with a minimum of 5.00 credits, demonstrated financial need, a minimum 70% average in the last two equivalent full-time semesters and an interest in the industry. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 3 awards of \$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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

**Donor(s):** Alumni and friends of the University of Guelph

**Qualification(s):** Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

**Amount:** 2 awards of \$1,250

**Journey's End Mangement Inc. Scholarships (ACCESS) [I4504]**

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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Journey's End Corporation

**Qualification(s):** Students in the B.Comm. program, in a major offered by the School of Hospitality and Tourism Management, who have completed 13.00 to 17.50 credits at the time of application and have at least a 70% average in the last two equivalent full-time semesters. The award will be distributed 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 \$1,500

**Kathleen and R. Douglas Kennedy Scholarship in CSAHS [I0546]**

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.).

**Donor(s):** Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy

**Qualification(s):** This scholarship will be awarded to a student in CSAHS with high academic achievement. Preference will be given to students registered in the Department of Family Relations and Applied Nutrition, the School of Hospitality and Tourism Management, or the Department of Marketing and Consumer Studies and to students with demonstrated financial need.

**Amount:** 1 award of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '52

**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:** 2 awards of \$2,500

**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.).

**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 \$1,000

**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 by letter, including a summary of local agricultural activities and a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. ACCESS AWARD

**Donor(s):** The Shaw Scholarship Committee

**Qualification(s):** Students registered in the B.A.Sc., B.Comm. in Agricultural Business, B.Sc.(Agr.) or D.V.M. programs studying agriculture, horticulture, equine studies, food and nutrition or veterinary sciences with demonstrated financial need, a 70% cumulative average and involvement in local agricultural activities. Preference will be given to first year 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 \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

**Donor(s):** The Giuliani Family

**Qualification(s):** Most academically promising applicant with a demonstrated disability and having financial need.

**Amount:** 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

**Qualification(s):** Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

**Amount:** 1 award of \$1,000

**Westmont Hospitality Group ACCESS Scholarship [I4126]**

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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Journey's End Corporation

**Qualification(s):** Students in the B.Comm. program, in a major offered by the School of Hospitality and Tourism Management, who have completed 13.00 to 17.50 credits at the time of application and have at least a 70% average in the last two equivalent full-time semesters. The award will be distributed 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 \$1,500

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The William and Nona Heaslip Foundation

**Qualification(s):** Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

**Amount:** 2 awards of \$15,000

<b>Yeandle Family In-Course Scholarships [I3546]</b>	
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. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Awards will be made on the basis of financial need and academic achievement. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Estate of Audrey Yeandle</b>
<i>Qualification(s):</i>	Full-time undergraduate students registered in each of the eight academic units and CIDS within the College of Social and Applied Human Sciences . Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Awards will be made on the basis of financial need and academic achievement.
<i>Amount:</i>	Several awards up to \$2,000

### In-course Awards with Financial Need

<b>Archie and Isabelle (Cook) Rintoul CSAHS Bursary [I3018]</b>	
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. Two awards of \$500 (one in each of the two colleges).	
<i>Donor(s):</i>	<b>Archie and Isabelle (Cook) Rintoul</b>
<i>Qualification(s):</i>	Students enrolled in the BASc program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program and the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs. Students who have completed semester 4 (10.00 credits) and who have demonstrated financial need are eligible.
<i>Amount:</i>	2 awards of \$500

<b>Bette Stephenson Accessibility Bursary [I3054]</b>	
In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.
<i>Amount:</i>	3 awards to a maximum of \$1,500

<b>Brinson Partners Inc. Bursaries [I3526]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Brinson Partners Inc.</b>
<i>Qualification(s):</i>	Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,500

<b>Burnbrae Farms Bursaries [I3525]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Burnbrae Farms</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Canadian Imperial Bank of Commerce Bursaries [I3511]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Canadian Imperial Bank of Commerce</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	2 awards of \$1,300

<b>Class of '72: 25th Reunion Bursaries [I3512]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of '72: 25th Reunion</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$1,000

<b>Class of O.A.C. '33 Bursaries [I3531]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of 1933 (in honour of the late Prof. W.J. Squirrel)</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$500

<b>Class of O.A.C. '36 Bursaries [I3501]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of 1936</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$500

<b>David R. Leach Memorial Bursary [I3534]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mrs Deborah Leach-Sartor</b>
<i>Qualification(s):</i>	O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$1,000

<b>Elizabeth Burton Bursaries [I3503]</b>	
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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.	
<i>Donor(s):</i>	<b>Mrs. Elizabeth Burton</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of up to \$2000

<b>George and Margaret J. Miles Memorial Bursary [I3544]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Established by the Miles Family</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Gonder Family Bursary [I3543]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Dr. John Gonder and family</b>
<i>Qualification(s):</i>	Full-time B.Comm. students with 5 to 15 course credits, majoring in Management Economics in Industry and Finance or Marketing Management who are continuing in their program of study with at least a 70% cumulative average, and demonstrated financial need are eligible to apply. 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). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$1,000
<b>Grand River Chapter (Society of Management Accountants of Ontario) Bursary [I3032]</b>	
Donated by the Grand River Chapter of the Society of 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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Society of Management Accountants of Ontario</b>
<i>Qualification(s):</i>	Full-time student in financial need and registered in the B.Comm. program.
<i>Amount:</i>	1 award of \$500
<b>Gryphon Investment Council Bursaries [I3513]</b>	
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Gryphon Investment Council Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Guelph Compassionate Health Bursary [I3061]</b>	
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.	
<i>Donor(s):</i>	<b>Student Health and Dental Plan Reserve</b>
<i>Qualification(s):</i>	All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.
<i>Amount:</i>	Several varies to a maximum \$1,500

<b>Guelph Student Assistance Program [I3056]</b>	
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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Undergraduate Students</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of varying amounts up to \$1,000
<b>Gwen Karr Memorial Bursary [I3010]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Mr. T.K.C. Karr, O.A.C. '32</b>
<i>Qualification(s):</i>	O.A.C. students with demonstrated financial need
<i>Amount:</i>	Several varies
<b>Helen Mahon Memorial Bursary [I3063]</b>	
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.	
<i>Donor(s):</i>	<b>Family and Friends of Helen Mahon</b>
<i>Qualification(s):</i>	Students registered in any program who come from a family where one parent is deceased.
<i>Amount:</i>	1 award of \$500
<b>Howard and Myrtle Rogers Bursaries [I3537]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Estate of Howard and Myrtle Rogers</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	10 up to \$2,000
<b>International Emergency Medical Aid Assistance [I3059]</b>	
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.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several awards of varying amounts
<b>International Student Bursaries [I3009]</b>	
Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.	
<i>Donor(s):</i>	<b>Mrs. Norma L. Valeriotte</b>
<i>Qualification(s):</i>	Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.
<i>Amount:</i>	Several 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. Awarded in the Winter semester.

**Donor(s):** Family and friends of Irvine and Grace B.L.A.ck

**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

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Mr. J.H. Leroux

**Qualification(s):** O.A.C. degree students in the B.Sc.(Agr.), B.Sc., B.Comm. or B.Sc.Env.) programs with demonstrated financial need. Satisfactory academic standing is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 4 awards of \$1,000

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Estate of Mary I. Whitelock

**Qualification(s):** All undergraduate, graduate or O.A.C. diploma 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

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '38 Alumni

**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 7 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD.

**Donor(s):** O.A.C. Class of '55

**Qualification(s):** Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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 \$500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '57 and the O.A.C. Alumni Foundation

**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:** 5 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Foundation

**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:** 4 awards of \$500

**Ontario Agri Business Association Degree Bursaries [I3502]**

The Ontario Agri Business Association, with the aid of the Ontario government's OSOTF program, has made available four bursaries of \$750. Apply by October 7 to Student Financial Services with a letter, of up to two pages in length, detailing your involvement and including a University of Guelph Financial Needs Assessment Form. ACCESS AWARD

**Donor(s):** Ontario Agri Business Association

**Qualification(s):** Awarded to students who have completed a minimum of 10.0 credits in the B.SC.(Agr.) program in either an unspecialized major or in Food Agriculture and Resource Economics, Animal Science, Agronomy or in the B.Comm. program in Agricultural Business. Students must have a minimum cumulative average of 60%. Students will be selected based on demonstrated financial need and on involvement in community/extracurricular activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 4 awards of \$750

**Ontario Cattlemen's Association Degree Bursary [I3506]**

Provided by the Ontario Cattlemen's Association and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Ontario Cattlemen's Association

**Qualification(s):** Students with demonstrated financial need who are enrolled in semester 5 or above in the B.Sc.(Agr.), B.Comm.(Agricultural Business), B.Sc.(Animal Biology) or B.Sc.(Food Science) program and have a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 4 awards of \$500

**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. Awarded in the Winter semester.

**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 Egg Producers' Marketing Board 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** The Ontario Egg Producers' Marketing Board

**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:** 6 awards of \$1,000

**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 and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Ontario Federation of Agriculture

**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. A student may receive up to three bursaries annually (\$1,500). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 12 awards of \$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. Awarded in the Winter semester.

**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.) to Student Financial Services by October 7. Awarded in the Winter semester.

**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]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

**Donor(s):** Office of Registrarial Services

**Qualification(s):** Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

**Amount:** Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Association

**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:** 3 awards of \$500

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

<b>University of Guelph International Bursary [I3048]</b>
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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.
<i>Donor(s):</i> <b>University of Guelph</b>
<i>Qualification(s):</i> Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i> Several varies
<b>University of Guelph Undergraduate In-Course Bursaries (MET-TR-UG) [I3037]</b>
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. Awarded in the Winter semester.
<i>Donor(s):</i> <b>University of Guelph</b>
<i>Qualification(s):</i> Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i> Several awards ranging in value from \$100 to \$3,000
<b>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [I3047]</b>
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. Awarded in the Winter semester.
<i>Donor(s):</i> <b>University of Guelph</b>
<i>Qualification(s):</i> Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i> Several awards to a maximum of \$800
<b>University Police Bursaries [I3019]</b>
The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.
<i>Donor(s):</i> <b>The University Police</b>
<i>Qualification(s):</i> Full-time undergraduate and graduate students who have financial need.
<i>Amount:</i> Several of various amounts
<b>University Student Assistance Program [I3057]</b>
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. Typically, awarded in the Winter semester.
<i>Donor(s):</i> <b>University of Guelph</b>
<i>Qualification(s):</i> 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).
<i>Amount:</i> Several awards of various amounts to a maximum of \$1,000
<b>In-course Travel Grants</b>
<b>A.W. Archibald Memorial Travel Grant [T4541]</b>
Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.
<i>Donor(s):</i> <b>A.W. Archibald, O.A.C. '33</b>
<i>Qualification(s):</i> Undergraduate students in any O.A.C. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> Several up to \$1000

<b>Aeroplan International Travel Grant [T0604]</b>
Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.
<i>Donor(s):</i> <b>Aeroplan</b>
<i>Qualification(s):</i> Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.
<i>Amount:</i> 1 plane ticket per each semester
<b>Arthur D. Latornell Undergraduate Travel Grants [T0058]</b>
An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.
<i>Donor(s):</i> <b>The Estate of Arthur D. Latornell</b>
<i>Qualification(s):</i> Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.
<i>Amount:</i> several up to a maximum of \$1000
<b>Canada's Outdoor Farm Show Travel Grants [T3536]</b>
Established by Canada's Outdoor Farm Show and the O.A.C. Alumni Foundation, 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 February 1. The letter should outline the reasons for participating in the meeting, competition, etc., and include a brief statement of learning objectives and appropriate involvement in student activities. Upon successful return from travel opportunity, student(s) should be willing to present report to classmates and/or faculty. ACCESS AWARD
<i>Donor(s):</i> <b>Canada's Outdoor Farm Show</b>
<i>Qualification(s):</i> Undergraduate students in O.A.C. who have completed semester 4 in Agricultural Science or Agricultural Business or who have completed semester 2 of the Diploma in Agriculture program (Alfred, Guelph, Kemptville, Ridgetown).
<i>Amount:</i> 1 award of \$1,000
<b>Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]</b>
The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.
<i>Donor(s):</i> <b>Canadian Friends of the Hebrew University in Jerusalem</b>
<i>Qualification(s):</i> Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 3 Awards with varying amounts

**D & G Hart Travel Grant [T0601]**

Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.

**Donor(s):** Family of Douglas and George Hart

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum 70% cumulative average who intend to participate in travel related to course study.

**Amount:** 1 award of up to awards of \$1,000

**Elizabeth M. (Betty) Upton Memorial Travel Grant [T0366]**

Established in memory of Elizabeth M. Upton, a faculty member in the School of Hospitality and Tourism Management, who played a key role in the development of the School and was instrumental in the development of the Institutional Foodservice Management major. Apply by letter, by April 1, to the HTM Awards Committee describing the travel, the expected benefit and including a budget and any expected sources of funding. Varies but will not exceed \$500.

**Donor(s):** The faculty and alumni of HTM and family and friends of Elizabeth M. (Betty) Upton

**Qualification(s):** Student who demonstrates the greatest financial need for travel to a recognized University of Guelph study abroad, exchange or letter of permission activity outside Canada, or to attend a relevant professional conference, or to collect research data for a thesis or major paper. Students must have completed two or more semesters in a graduate or undergraduate program offered by the School of Hospitality and Tourism Management, and must be in good academic standing. The project or conference must occur within 12 months.

**Amount:** 1 award of \$500

**H.C. Mason Travel Scholarships [T0598]**

In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Mr. F.W. Bray

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study

**Amount:** various awards up to \$1,500

**J. Ross Cavers Study Abroad Scholarship [T0051]**

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

**Donor(s):** Class of O.A.C. '53

**Qualification(s):** Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

**Amount:** 3 awards of \$1,800

**J.D. Cunningham Travel Grant [T0605]**

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

**Donor(s):** Ontario Food Protection Association

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

**Amount:** 1 award of \$2,000

**Joan Doherty Travel Scholarship [T0401]**

Established in memory of the late Joan Doherty (a member of the class of FACS '78) to assist students to attend a conference related to their studies. Apply to the Chair of the Department of Marketing & Consumer Studies Awards Committee by March 1 including a budget and a description of the travel.

**Donor(s):** Mr. Thomas B. Doherty

**Qualification(s):** Undergraduate or graduate student in Marketing & Consumer Studies with a minimum cumulative average of 70%. The recipient will be selected based upon the cost of attending the conference and the benefit it will bring to the student's program of study.

**Amount:** 1 award of \$400

**Louise McConkey Travel Scholarship [T0431]**

Established in memory of the late Louise McConkey, Mac '27 to defray travel costs related to the student's course of study. Selection will be made on the basis of the value of the travel to the students' studies. Apply to the Chair of the Department of Marketing & Consumer Studies Awards Committee including a budget and a description of the travel and the benefit to be gained. One or more awards up to a total of \$1,400.

**Donor(s):** The estate of Louise McConkey

**Qualification(s):** Undergraduate or graduate students in the Department of Marketing & Consumer Studies with a minimum 70% cumulative average in the last two full-time equivalent semesters.

**Amount:** 1 award of \$1,400

**Massey Fund Travel Scholarships [T0417]**

Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.

**Donor(s):** O.A.C. Awards Committee

**Qualification(s):** O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.

**Amount:** 1 award of \$750

**O.A.C. '05 Excellence Travel Grant [T0060]**

In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Class of OAC 1905 and the Class of OAC 2005

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.

**Amount:** 1 award of \$300

**O.A.C. '47 Travel Bursaries [T3505]**

Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD

**Donor(s):** O.A.C. '47

**Qualification(s):** O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of \$600

**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 April 1, 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 \$1,450

<b>Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]</b>	
The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.	
<i>Donor(s):</i>	<b>The Estate of Richard Hungerford</b>
<i>Qualification(s):</i>	Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	Several awards of varying amounts to a maximum of \$1,000
<b>Robb Travel Grants [T3028]</b>	
These travel grants have been provided in recognition of her love of agriculture, by the estate of Martha Robb, Paris, Ontario. Apply to the Dean, O.A.C. by April 15. Varying amounts (80% of the travel costs will be covered up to \$750 per student).	
<i>Donor(s):</i>	<b>The estate of Martha Robb</b>
<i>Qualification(s):</i>	O.A.C. students who are attending another university on a Letter of Permission.
<i>Amount:</i>	Several varies
<b>Roderick Long International Travel Grant [T0360]</b>	
Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associate with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.	
<i>Donor(s):</i>	<b>Mr. Roderick W. Long</b>
<i>Qualification(s):</i>	O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters
<i>Amount:</i>	Several awards of \$1,500
<b>University of Guelph Travel Scholarships [T0421]</b>	
The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.
<i>Amount:</i>	Several up to \$1,000
<b>Varley and Lyon Exchange Scholarships [T0298]</b>	
Miss Bertha Manent of New York City has established five or more Mrs. Lillie-Jane Lyon Varley and Clarence D. Lyon Exchange scholarships. Apply to Student Financial Services by April 1, including a letter from the Dean or Director approving the proposed program of study.	
<i>Donor(s):</i>	<b>Miss Bertha Manent</b>
<i>Qualification(s):</i>	O.A.C. students 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. Such course of study must lead to the degree of B.Sc.(Agr.), B.Comm. in Agricultural Business or the Diploma in Agriculture at the University of Guelph.
<i>Amount:</i>	3 awards of \$750

## 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

<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>December 6th Memorial Scholarship [E0005]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Physical and Engineering Science. 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. Demonstrated financial need may also be considered.
<i>Amount:</i>	1 2250 (\$750 in each of semesters 1, 3 and 5).
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Earl B. MacNaughton Entrance Scholarships [E0172]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students with high academic standing, entering an honours program in the College of Physical and Engineering Science. Emphasis will be given to academic achievement in high school science and mathematics.
<i>Amount:</i>	4 awards of \$1,000

<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000
<b>McArthur-Humphries Scholarship [E0183]</b>	
Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Wilhelmina McArthur-Humphries Trust Fund</b>
<i>Qualification(s):</i>	Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.
<i>Amount:</i>	12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

**Donor(s):** Ross and Mary Lou Klopp

**Qualification(s):** Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

**Amount:** 1 award of \$500

<b>Registrar's Entrance Scholarships [E0384]</b>	
Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students entering a full-time undergraduate program on the basis of financial need and academic merit.
<i>Amount:</i>	500 awards of \$2,000

<b>Rol-Land Farms Scholarships [E4519]</b>	
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 (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 May 1. ACCESS AWARD	
<i>Donor(s):</i>	<b>Rol-Land Farms</b>
<i>Qualification(s):</i>	Outstanding entering undergraduate degree students 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).
<i>Amount:</i>	13 awards of \$2,000

<b>University of Guelph Accessibility Scholarship [E3038]</b>	
Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students entering a full-time undergraduate program on the basis of financial need and academic excellence.
<i>Amount:</i>	150 awards of \$9,000

## Entrance Awards with Financial Need

<b>Harvey Graham Bursary [E3030]</b>	
Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.	
<i>Donor(s):</i>	<b>Harvey Graham, O.A.C. '39</b>
<i>Qualification(s):</i>	Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.
<i>Amount:</i>	1 award of \$1,700

<b>International Student Entrance Bursaries [E3043]</b>	
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. Students who have applied to the University of Guelph will receive an application form.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
<i>Amount:</i>	Several awards of \$1,000, Several awards of \$3,000

<b>Robert Arthur Stewart Bursaries [E3272]</b>	
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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).	
<i>Donor(s):</i>	<b>The Estate of Mrs. H. Stewart</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	12 awards of \$500

## In-course Scholarships

<b>Bill Taylor Memorial Scholarship [I0280]</b>	
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>AMF Canada Ltd.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$900

<b>Certified General Accountants Award for Excellence Prize [C0025]</b>	
Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.	
<i>Donor(s):</i>	<b>Certified General Accountants Association of Ontario</b>
<i>Qualification(s):</i>	Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGEC*2220; Management Accounting AGEC*2230; and Intermediate Accounting AGEC*3330.
<i>Amount:</i>	1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

<b>CFRU Volunteer Award [I0215]</b>	
Apply to the CFRU Board of Governors by April 30.	
<i>Donor(s):</i>	<b>Station Manager, CFRU</b>
<i>Qualification(s):</i>	Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.
<i>Amount:</i>	2 awards of \$250

<b>Class of 1970 Scholarship [I0424]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,400

<b>College of Physical Engineering Science Academic Scholarship [I0073]</b>	
Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Offered in the Winter semester to students who have completed at least 15.0 course credits in a College of Physical and Engineering Science program and have excellent grades but have not received awards recently.
<i>Amount:</i>	2 awards of \$250

<b>College of Physical Engineering Science Graduation Prize [C0075]</b>	
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application not required. One award of \$250 and a commemorative plaque.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Student graduating with the highest cumulative average from an honours B.Sc. program in a Physical and Engineering Science area.
<i>Amount:</i>	1 award of \$250, 1 Commemorative plaque

<b>College of Physical Engineering Science Scholarship [I0076]</b>
Awarded in the Fall semester to a student who has completed semester 6 in the previous Fall, Winter or Spring semesters and who is enrolled in Year 4 of a College of Physical and Engineering Science program. Application not required.
<i>Donor(s):</i> <b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i> Recipients will be selected on the basis of a high average (minimum 80% average required) in courses normally taken in Year 3.
<i>Amount:</i> 1 award of \$250
<b>Collins Barrow Award [I0040]</b>
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.
<i>Donor(s):</i> <b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i> Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i> 1 award of \$500
<b>David F. Boyes Apiculture Scholarship [I0031]</b>
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.
<i>Donor(s):</i> <b>The Apiculture Club</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$150
<b>Deans' Scholarships [I0323]</b>
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.
<i>Donor(s):</i> <b>Board of Governors</b>
<i>Qualification(s):</i> Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i> 150 awards of \$1,000
<b>Dr. Charles Capstick Graduation Prize [C0558]</b>
Provided by the Department of Computing and Information Science, these scholarships are awarded in May to students who have completed an undergraduate degree in a Computing and Information Science program and have achieved the highest and second highest cumulative averages at graduation. Application not required.
<i>Donor(s):</i> <b>Department of Computing and Information Science</b>
<i>Qualification(s):</i> Students who have completed an undergraduate degree in Computing and Information Science (CIS) in the previous twelve months.
<i>Amount:</i> 1 award of \$500, 1 award of \$300
<b>Dr. James Linders Scholarship [I0559]</b>
Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 3 Computing and Information Science core courses. Application not required.
<i>Donor(s):</i> <b>Department of Computing and Information Science</b>
<i>Qualification(s):</i> Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 15.0 to 17.5 course credits and have taken the CIS core courses required for Year 3.
<i>Amount:</i> 1 award of \$500, 1 award of \$300
<b>Dr. Mary McLeish Scholarship [I0560]</b>
Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 1 Computing and Information Science core courses. Application not required.
<i>Donor(s):</i> <b>Department of Computing and Information Science</b>
<i>Qualification(s):</i> Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 5.0 to 7.5 course credits and have taken the CIS core courses required for Year 1.
<i>Amount:</i> 1 award of \$500, 1 award of \$300

<b>Dr. Ted Swart Scholarship [I0561]</b>
Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 2 Computing and Information Science core courses. Application not required.
<i>Donor(s):</i> <b>Department of Computing and Information Science</b>
<i>Qualification(s):</i> Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 10.0 to 12.5 course credits and have taken the CIS core courses required for Year 2.
<i>Amount:</i> 1 award of \$500, 1 award of \$300
<b>E.B. MacNaughton Convocation Prize [C0171]</b>
Established by the College of Physical and Engineering Science to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application not required. One award of a plaque-mounted medal and \$250.
<i>Donor(s):</i> <b>The College of Physical and Engineering Science</b>
<i>Qualification(s):</i> The College of Physical and Engineering Science nominee for the Winegard Medal.
<i>Amount:</i> 1 award of \$250, 1 Plaque-mounted medal
<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.
<i>Donor(s):</i> <b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i> Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i> 1 award of \$1,000
<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.
<i>Donor(s):</i> <b>Mrs. George A. Gray</b>
<i>Qualification(s):</i> Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i> 2 awards of \$1,250
<b>Governor General's Medal [C0044]</b>
Established by the Office of the Governor General of Canada. Application not required.
<i>Donor(s):</i> <b>The Chancellor</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Silver medal
<b>International Undergraduate Scholarship [I0577]</b>
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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.
<i>Donor(s):</i> <b>International Student Organization (ISO)</b>
<i>Qualification(s):</i> Full-time International 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 75%, and is registered at the time of application.
<i>Amount:</i> 1 award of \$1,000

**John Eccles Scholarship [I0093]**

Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.

*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 \$600

**Kenneth W. Hammond Award [I0045]**

The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.

*Donor(s):* **Kenneth W. Hammond**

*Qualification(s):* Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.

*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 the end of the 12th week of the Winter semester.

*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 LGBT Studies [I0591]**

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LGBT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LGBT peoples. Preference will be given to an applicant who is involved in the LGBT 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 LGBT 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 (LGBT) 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. Application not required.

*Donor(s):* **Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues**

*Qualification(s):* Student in C.P.E.S. with the highest average grade in CHEM\*1040,1050 and 2700 who 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.

*Donor(s):* **Students, staff, faculty and friends of Dr. Leonard Conolly**

*Qualification(s):* Full-time visiting exchange undergraduate or graduate 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). 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.

*Amount:* 1 award of \$1,000

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

*Donor(s):* **TBA**

*Qualification(s):* The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

*Amount:* 3 awards of \$250

**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

**Stephanie Wilken Volunteer Award [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 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

<b>Thomas H. Peters Scholarship [I0233]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Friends and associates of Thomas H. Peters</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$250
<b>Toronto District Beekeeper's Association Scholarship [I0285]</b>	
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application not required.	
<i>Donor(s):</i>	<b>Mr. Jack Robinson</b>
<i>Qualification(s):</i>	The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
<i>Amount:</i>	1 award of \$500
<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000
<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400
<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal
<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal
<b>Waterloo-Wellington CA Association Award [I0367]</b>	
Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Waterloo-Wellington Chartered Accountants Association</b>
<i>Qualification(s):</i>	Student who achieves the highest academic standing in the course AGECE*3330, Intermediate Accounting.
<i>Amount:</i>	1 award of \$100

## In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000
<b>C.P.E.S. Dean's Scholarship - ACCESS [I4527]</b>	
Established by a number of industrial, commercial and public sector corporations, 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. Awarded in the Winter semester. This award may be held once only. ACCESS AWARD	
<i>Donor(s):</i>	<b>Established by a number of industrial, commercial and public sector corporations</b>
<i>Qualification(s):</i>	Students with demonstrated financial need registered in any major program in C.P.E.S. in, or beyond, second year. A minimum 80% cumulative average is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$750
<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Earl B. MacNaughton C.P.E.S. ACCESS Scholarships [I4172]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students currently registered in the final year of an honours program in the College of Physical and Engineering Science 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).
<i>Amount:</i>	2 awards of \$1,000
<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000

**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 April 1 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):* A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

*Amount:* 1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Euclid-Hitachi of Canada Ltd.**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**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.P.E.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 if applicable, attach a letter stating research interest and involvement. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Mrs. Margaret L. Middleton**

*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 \$500

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

*Donor(s):* **The Giuliani Family**

*Qualification(s):* Most academically promising applicant with a demonstrated disability and having financial need.

*Amount:* 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

*Donor(s):* **University of Guelph Retirees Association (U.G.R.A.)**

*Qualification(s):* Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

*Amount:* 1 award of \$1,000

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The William and Nona Heaslip Foundation**

*Qualification(s):* Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

*Amount:* 2 awards of \$15,000

**In-course Awards with Financial Need****Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

*Donor(s):* **University of Guelph**

*Qualification(s):* Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

*Amount:* 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

<b>Class of '72: 25th Reunion Bursaries [I3512]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of '72: 25th Reunion</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$1,000
<b>Elizabeth Burton Bursaries [I3503]</b>	
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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.	
<i>Donor(s):</i>	<b>Mrs. Elizabeth Burton</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of up to \$2000
<b>Gryphon Investment Council Bursaries [I3513]</b>	
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Gryphon Investment Council Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Guelph Compassionate Health Bursary [I3061]</b>	
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.	
<i>Donor(s):</i>	<b>Student Health and Dental Plan Reserve</b>
<i>Qualification(s):</i>	All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.
<i>Amount:</i>	Several varies to a maximum \$1,500
<b>Guelph Student Assistance Program [I3056]</b>	
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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Undergraduate Students</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of varying amounts up to \$1,000
<b>Helen Mahon Memorial Bursary [I3063]</b>	
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.	
<i>Donor(s):</i>	<b>Family and Friends of Helen Mahon</b>
<i>Qualification(s):</i>	Students registered in any program who come from a family where one parent is deceased.
<i>Amount:</i>	1 award of \$500

<b>Howard and Myrtle Rogers Bursaries [I3537]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Estate of Howard and Myrtle Rogers</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	10 up to \$2,000
<b>International Emergency Medical Aid Assistance [I3059]</b>	
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.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several awards of varying amounts
<b>International Student Bursaries [I3009]</b>	
Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.	
<i>Donor(s):</i>	<b>Mrs. Norma L. Valeriotte</b>
<i>Qualification(s):</i>	Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.
<i>Amount:</i>	Several of varying amounts
<b>Irvine and Grace Black Memorial Bursary [I3051]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Family and friends of Irvine and Grace B.L.A.ck</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>Mary I. Whitelock Bursaries [I3524]</b>	
Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Estate of Mary I. Whitelock</b>
<i>Qualification(s):</i>	All undergraduate, graduate or O.A.C. diploma students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	13 awards of \$2,000
<b>Ontario Co-operatives R.P. Forshaw Bursary [I3013]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$400

<b>Robert Auger Humanitarian Bursary [I3058]</b>	
This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.	
<i>Donor(s):</i>	<b>Office of Registrarial Services</b>
<i>Qualification(s):</i>	Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.
<i>Amount:</i>	Several awards of \$500

<b>Ron Scriver Memorial Bursary [I3547]</b>	
Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD	
<i>Donor(s):</i>	<b>Family and Friends of Ron Scriver</b>
<i>Qualification(s):</i>	Students registered in any program offered by C.P.E.S. with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OTSS award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$1,500

<b>Scotiabank Bursaries [I3532]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Scotiabank</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>University of Guelph Access Bursaries [I3522]</b>	
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000	
<i>Donor(s):</i>	<b>Alumni and Friend of the University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of \$500, Several awards of \$2,000

<b>University of Guelph Alumni Association Access Bursaries [I3523]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>University of Guelph Alumni Association</b>
<i>Qualification(s):</i>	Full-time in-course students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,000

<b>University of Guelph Child Care Bursaries [I3053]</b>	
In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.
<i>Amount:</i>	Several awards of up to \$2,000

<b>University of Guelph International Bursary [I3048]</b>	
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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several varies

<b>University of Guelph Undergraduate In-Course Bursaries (MET-TR-UG) [I3037]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards ranging in value from \$100 to \$3,000

<b>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [I3047]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards to a maximum of \$800

<b>University Police Bursaries [I3019]</b>	
The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The University Police</b>
<i>Qualification(s):</i>	Full-time undergraduate and graduate students who have financial need.
<i>Amount:</i>	Several of various amounts

<b>University Student Assistance Program [I3057]</b>	
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. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of various amounts to a maximum of \$1,000

### In-course Travel Grants

<b>Aeroplan International Travel Grant [T0604]</b>	
Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.	
<i>Donor(s):</i>	<b>Aeroplan</b>
<i>Qualification(s):</i>	Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.
<i>Amount:</i>	1 plane ticket per each semester

**Arthur D. Latornell Undergraduate Travel Grants [T0058]**

An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latornell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$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

<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000

<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000
<b>McArthur-Humphries Scholarship [E0183]</b>	
Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Wilhelmina McArthur-Humphries Trust Fund</b>
<i>Qualification(s):</i>	Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.
<i>Amount:</i>	12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

**Donor(s):** Mrs. Helen Quinn (O.A.C. '35)

**Qualification(s):** Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

**Amount:** 1 award of \$1,500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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

## Entrance Scholarships with Financial Need

### Bill Klopp Memorial Award [E0150]

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

*Donor(s):* **Ross and Mary Lou Klopp**

*Qualification(s):* Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

*Amount:* 1 award of \$500

### Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic merit.

*Amount:* 500 awards of \$2,000

### 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 (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 May 1. ACCESS AWARD

*Donor(s):* **Rol-Land Farms**

*Qualification(s):* Outstanding entering undergraduate degree students 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

### University of Guelph Accessibility Scholarship [E3038]

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

*Amount:* 150 awards of \$9,000

## Entrance Awards with Financial Need

### 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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).

*Donor(s):* **W. Roy Hindle and family**

*Qualification(s):* An entering O.A.C. degree student who has 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

### Harvey Graham Bursary [E3030]

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

### 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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

### 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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

## In-course Scholarships

### Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.

*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

<b>Blackburn Scholarship [I0404]</b>	
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 by April 1.	
<i>Donor(s):</i>	<b>D.J. Blackburn</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>C.M. and D.J. Switzer Scholarships [I0276]</b>	
Apply by April 1 to Student Financial Services.	
<i>Donor(s):</i>	<b>C.M. and D.J. Switzer</b>
<i>Qualification(s):</i>	One to a student who has completed semester 2 of the Diploma in Agriculture program and one to a student who has completed semester 4 of a degree program in O.A.C. Recipients will have a minimum of 70% standing and have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.
<i>Amount:</i>	1 award of \$2,000
<b>Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]</b>	
Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards Committee by April 1 with a summary of participation in the Ag Ec & Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member.	
<i>Donor(s):</i>	<b>Canadian Agri-Marketing Association (Ontario)</b>
<i>Qualification(s):</i>	Student who has competed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec & Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing.
<i>Amount:</i>	1 award of \$1,500
<b>Canadian Heritage Garden Foundation Scholarship [I0551]</b>	
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 not required.	
<i>Donor(s):</i>	<b>The Canadian Heritage Garden Foundation</b>
<i>Qualification(s):</i>	Students registered in Landscape Architecture who have completed 10.5 credits.
<i>Amount:</i>	1 award of \$1,000
<b>Canadian Society of Landscape Architects Prize - B.L.A. [C0136]</b>	
Application not required.	
<i>Donor(s):</i>	<b>The Canadian Society of Landscape Architects</b>
<i>Qualification(s):</i>	Student graduating from the Bachelor of Landscape Architecture program who has maintained a high academic standing and contributed to the School and the profession.
<i>Amount:</i>	1 award of \$500
<b>Certified General Accountants Award for Excellence Prize [C0025]</b>	
Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.	
<i>Donor(s):</i>	<b>Certified General Accountants Association of Ontario</b>
<i>Qualification(s):</i>	Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGECE*2220; Management Accounting AGECE*2230; and Intermediate Accounting AGECE*3330.
<i>Amount:</i>	1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)
<b>CFRU Volunteer Award [I0215]</b>	
Apply to the CFRU Board of Governors by April 30.	
<i>Donor(s):</i>	<b>Station Manager, CFRU</b>
<i>Qualification(s):</i>	Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.
<i>Amount:</i>	2 awards of \$250

<b>Charles McGowan Memorial Prize [C0187]</b>	
Established in memory of the late Lieutenant Charles McGowan. Application not required.	
<i>Donor(s):</i>	<b>Charles McGowan Memorial Fund</b>
<i>Qualification(s):</i>	Outstanding graduating student in an O.A.C. degree program.
<i>Amount:</i>	1 award of \$300
<b>Class of '51 O.A.C. Leadership Awards [C0063]</b>	
Established by Year '51 O.A.C., on the occasion of its 45th anniversary. At the discretion of the O.A.C. Awards Committee students may be selected before graduation. Application not required.	
<i>Donor(s):</i>	<b>Year '51 O.A.C.</b>
<i>Qualification(s):</i>	Students graduating from the degree program in a major in an O.A.C. department who have a 70% standing in the final year of study and who have demonstrated leadership in the College or University extracurricular activities.
<i>Amount:</i>	4 awards of \$1,000
<b>Class of '67 O.A.C. Centennial Scholarship [I0067]</b>	
Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Class of O.A.C. '67</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000
<b>Class of 1970 Scholarship [I0424]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,400
<b>Collins Barrow Award [I0040]</b>	
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i>	Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i>	1 award of \$500
<b>David F. Boyes Apiculture Scholarship [I0031]</b>	
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.	
<i>Donor(s):</i>	<b>The Apiculture Club</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$150
<b>Deans' Scholarships [I0323]</b>	
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i>	150 awards of \$1,000
<b>DMG Scholarship [I0428]</b>	
Established by DMG Landscape Architects, Burnaby, B.C. Application not required.	
<i>Donor(s):</i>	<b>DMG Landscape Architects</b>
<i>Qualification(s):</i>	B.L.A. student who has completed semester 4 with a minimum 75% cumulative average and demonstrated outstanding ability in landscape design.
<i>Amount:</i>	1 award of \$1,000

<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.
<i>Donor(s):</i> <b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i> Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i> 1 award of \$1,000
<b>Garden Club of Toronto Scholarship [I0109]</b>
Apply to Associate Registrar, Student Financial Services by April 1.
<i>Donor(s):</i> <b>The Garden Club of Toronto</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.
<i>Donor(s):</i> <b>Mrs. George A. Gray</b>
<i>Qualification(s):</i> Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i> 2 awards of \$1,250
<b>Governor General's Medal [C0044]</b>
Established by the Office of the Governor General of Canada. Application not required.
<i>Donor(s):</i> <b>The Chancellery</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Silver medal
<b>Howard B. Dunington-Grubb Scholarships [I0092]</b>
Offered by the Sheridan Nurseries. Application not required.
<i>Donor(s):</i> <b>J. Vilhelm Stensson, Sheridan Nurseries Limited</b>
<i>Qualification(s):</i> Students who have completed semester 6 in the Landscape Architecture program. Students with a minimum of 70% standing and outstanding design ability are eligible.
<i>Amount:</i> 2 awards of \$750
<b>International Undergraduate Scholarship [I0577]</b>
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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.
<i>Donor(s):</i> <b>International Student Organization (ISO)</b>
<i>Qualification(s):</i> Full-time International 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 75%, and is registered at the time of application.
<i>Amount:</i> 1 award of \$1,000

<b>John Eccles Scholarship [I0093]</b>
Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Student Housing Services</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$600
<b>Kenneth W. Hammond Award [I0045]</b>
The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.
<i>Donor(s):</i> <b>Kenneth W. Hammond</b>
<i>Qualification(s):</i> Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.
<i>Amount:</i> 1 award of \$1,000
<b>Kip Hunter Prize [I0139]</b>
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 the end of the 12th week of the Winter semester.
<i>Donor(s):</i> <b>Faculty, students and staff of the Philosophy Department</b>
<i>Qualification(s):</i> Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
<i>Amount:</i> 1 Book prize
<b>Lambda Foundation Scholarship in LBGT Studies [I0591]</b>
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.
<i>Donor(s):</i> <b>Lambda Foundation and other donors</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>Landscape Architecture Alumni Scholarships [I0329]</b>
Provided by the Alumni of the School of Landscape Architecture. Students, faculty or alumni may nominate eligible students to the School of Landscape Architecture by October 30.
<i>Donor(s):</i> <b>Landscape Architecture Alumni</b>
<i>Qualification(s):</i> 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 and leadership in extracurricular activities.
<i>Amount:</i> 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.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Conolly

**Qualification(s):** Full-time visiting exchange undergraduate or graduate 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). 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.

**Amount:** 1 award of \$1,000

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

**Donor(s):** TBA

**Qualification(s):** The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

**Amount:** 3 awards of \$250

**O.A.C. '55 Scholarships [I0064]**

Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.

**Donor(s):** O.A.C. '55

**Qualification(s):** Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.

**Amount:** 1 award of \$2,000

**O.A.C. Centennial Graduate Fellowships [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 Student Financial Services by April 1.

**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 are eligible for these fellowships. 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:** 2 awards of \$2,200

**O.A.C. Students' Federation Medal [C0217]**

Application 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 Medal

**Ontario Association of Landscape Architects Scholarship [I0219]**

Application not required.

**Donor(s):** The Ontario Association of Landscape Architects

**Qualification(s):** Student who has completed semester 5 of the B.L.A. program. The award is based on academic achievement, performance in design studio and leadership qualities.

**Amount:** 1 award of \$500

**Oxford County Pork Producers Scholarship (Degree) [I0531]**

The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.

**Donor(s):** Oxford County Pork Producers

**Qualification(s):** Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.

**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

**Stephanie Wilken Volunteer Award [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 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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

<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000
<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400
<b>Vera Bezerey Memorial B.L.A. Design Scholarship [I0480]</b>	
The scholarship has been provided in memory of the first female O.D.H. graduate, Vera Bezerey. The recipient will be the student who has demonstrated an aptitude for community design. Application not required.	
<i>Donor(s):</i>	<b>O.D.H. Graduates Association</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$450
<b>Victor Chanasyk Medal [C0265]</b>	
The decision will be based on the recommendation of the faculty in the School of Landscape Architecture. Application not required.	
<i>Donor(s):</i>	<b>Victor Chanasyk</b>
<i>Qualification(s):</i>	Graduating Bachelor of Landscape Architecture student who, in the view of the faculty, is deemed to be the most promising professional practitioner.
<i>Amount:</i>	1 Medal
<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal
<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal
<b>Waterloo-Wellington CA Association Award [I0367]</b>	
Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Waterloo-Wellington Chartered Accountants Association</b>
<i>Qualification(s):</i>	Student who achieves the highest academic standing in the course AGE*3330, Intermediate Accounting.
<i>Amount:</i>	1 award of \$100

<b>William Furlong Scholarship in Microeconomics [I0582]</b>	
The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON*1050) in the fall semester. Application not required.	
<i>Donor(s):</i>	<b>Colleagues &amp; Friends of Dr. William Furlong</b>
<i>Qualification(s):</i>	Full-time students enrolled in Introductory Microeconomics (ECON*1050)
<i>Amount:</i>	3 awards of \$200

### In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000
<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000
<b>Erin Demers Memorial Scholarship [I0406]</b>	
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 April 1 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.	
<i>Donor(s):</i>	<b>Family and friends of Erin Katrina Demers</b>
<i>Qualification(s):</i>	A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.
<i>Amount:</i>	1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Euclid-Hitachi of Canada Ltd.**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**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.).

*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 \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

*Donor(s):* **The Giuliani Family**

*Qualification(s):* Most academically promising applicant with a demonstrated disability and having financial need.

*Amount:* 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

*Donor(s):* **University of Guelph Retirees Association (U.G.R.A.)**

*Qualification(s):* Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

*Amount:* 1 award of \$1,000

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The William and Nona Heaslip Foundation**

*Qualification(s):* Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

*Amount:* 2 awards of \$15,000

**In-course Awards with Financial Need****Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

*Donor(s):* **University of Guelph**

*Qualification(s):* Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

*Amount:* 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of '72: 25th Reunion**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1933 (in honour of the late Prof. W.J. Squirrel)**

*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:* 3 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Class of 1936

**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:** 2 awards of \$500

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Mrs Deborah Leach-Sartor

**Qualification(s):** O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and 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:** 1 award of \$1,000

**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. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD. A number of awards ranging from \$500 to \$2,000.

**Donor(s):** The estate of Dr. Donald P. Watson

**Qualification(s):** Undergraduate students majoring in Horticultural Science, Landscape Architecture, Agronomy, Agricultural Science or Environmental Science, who have completed a minimum of 10.00 credits and who have demonstrated financial need. Recipients must have satisfactory academic standing in their last 10.00 credits. The scholarships will be awarded based on 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

**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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

**Donor(s):** Mrs. Elizabeth Burton

**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 up to \$2000

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Gryphon Investment Council Inc.

**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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

**Amount:** Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s):** Undergraduate Students

**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 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. Awarded in the Winter semester.

**Donor(s):** Mr. T.K.C. Karr, O.A.C. '32

**Qualification(s):** O.A.C. students with demonstrated financial need

**Amount:** Several varies

**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.

**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. Awarded in the Winter semester. 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

**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):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several awards of varying amounts

<b>International Student Bursaries [I3009]</b>	
Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.	
<i>Donor(s):</i>	<b>Mrs. Norma L. Valeriotte</b>
<i>Qualification(s):</i>	Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.
<i>Amount:</i>	Several of varying amounts
<b>Irvine and Grace Black Memorial Bursary [I3051]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Family and friends of Irvine and Grace B.L.A.ck</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>Landscape Architecture ACCESS Bursaries [I4531]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Faculty members and students in Landscape Architecture</b>
<i>Qualification(s):</i>	Undergraduate or graduate 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).
<i>Amount:</i>	2 awards of \$500
<b>Mary I. Whitelock Bursaries [I3524]</b>	
Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Estate of Mary I. Whitelock</b>
<i>Qualification(s):</i>	All undergraduate, graduate or O.A.C. diploma students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	13 awards of \$2,000
<b>O.A.C. '38 Lloyd Minshall Bursaries [I3529]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. '38 Alumni</b>
<i>Qualification(s):</i>	O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	7 awards of \$1,000
<b>O.A.C. '55 Access Bursaries [I3517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD.	
<i>Donor(s):</i>	<b>O.A.C. Class of '55</b>
<i>Qualification(s):</i>	Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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).
<i>Amount:</i>	Several awards of \$500

<b>O.A.C. '57 Bursaries [I3518]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. '57 and the O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	5 awards of \$1,000
<b>O.A.C. Alumni Foundation Access Bursaries [I3533]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	4 awards of \$500
<b>Ontario Co-operatives R.P. Forshaw Bursary [I3013]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$400
<b>Ontario Grape Growers Bursary [I3033]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The Ontario Grape Growers Action Committee</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several of various amounts
<b>Reid's Heritage Homes Bursaries in Landscape Architecture [I3521]</b>	
Established by Reid's Heritage Homes with the assistance of the Ontario government's OSOTF program to assist students 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Reid's Heritage Homes Ltd.</b>
<i>Qualification(s):</i>	Full-time students in the B.L.A. or M.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).
<i>Amount:</i>	2 awards of \$1,500
<b>Robert Auger Humanitarian Bursary [I3058]</b>	
This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.	
<i>Donor(s):</i>	<b>Office of Registrarial Services</b>
<i>Qualification(s):</i>	Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.
<i>Amount:</i>	Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Association

**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:** 3 awards of \$500

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The University Police

**Qualification(s):** Full-time undergraduate and graduate students who have financial need.

**Amount:** Several of various amounts

**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. Typically, awarded in the Winter semester.

**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

## In-course Travel Grants

### A.W. Archibald Memorial Travel Grant [T4541]

Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.

**Donor(s):** A.W. Archibald, O.A.C. '33

**Qualification(s):** Undergraduate students in any O.A.C. 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 up to \$1000

### Aeroplan International Travel Grant [T0604]

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

**Donor(s):** Aeroplan

**Qualification(s):** Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

**Amount:** 1 plane ticket per each semester

### Arthur D. Latonnell Undergraduate Travel Grants [T0058]

An endowment fund established in memory of Arthur D. Latonnell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latonnell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

### Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

### D & G Hart Travel Grant [T0601]

Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.

**Donor(s):** Family of Douglas and George Hart

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum 70% cumulative average who intend to participate in travel related to course study.

**Amount:** 1 award of up to awards of \$1,000

### H.C. Mason Travel Scholarships [T0598]

In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Mr. F.W. Bray

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study

**Amount:** various awards up to \$1,500

### J. Ross Cavers Study Abroad Scholarship [T0051]

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

**Donor(s):** Class of O.A.C. '53

**Qualification(s):** Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

**Amount:** 3 awards of \$1,800

### J.D. Cunningham Travel Grant [T0605]

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

**Donor(s):** Ontario Food Protection Association

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

**Amount:** 1 award of \$2,000

### Massey Fund Travel Scholarships [T0417]

Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.

**Donor(s):** O.A.C. Awards Committee

**Qualification(s):** O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.

**Amount:** 1 award of \$750

**O.A.C. '05 Excellence Travel Grant [T0060]**

In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Class of OAC 1905 and the Class of OAC 2005

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.

**Amount:** 1 award of \$300

**O.A.C. '47 Travel Bursaries [T3505]**

Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD

**Donor(s):** O.A.C. '47

**Qualification(s):** O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of \$600

**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 April 1, 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 \$1,450

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**Robb Travel Grants [T3028]**

These travel grants have been provided in recognition of her love of agriculture, by the estate of Martha Robb, Paris, Ontario. Apply to the Dean, O.A.C. by April 15. Varying amounts (80% of the travel costs will be covered up to \$750 per student).

**Donor(s):** The estate of Martha Robb

**Qualification(s):** O.A.C. students who are attending another university on a Letter of Permission.

**Amount:** Several varies

**Roderick Long International Travel Grant [T0360]**

Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associate with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.

**Donor(s):** Mr. Roderick W. Long

**Qualification(s):** O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters

**Amount:** Several awards of \$1,500

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$1,000

## 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

<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>December 6th Memorial Scholarship [E0005]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Physical and Engineering Science. 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. Demonstrated financial need may also be considered.
<i>Amount:</i>	1 2250 (\$750 in each of semesters 1, 3 and 5).
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200

<b>Earl B. MacNaughton Entrance Scholarships [E0172]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students with high academic standing, entering an honours program in the College of Physical and Engineering Science. Emphasis will be given to academic achievement in high school science and mathematics.
<i>Amount:</i>	4 awards of \$1,000
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000
<b>Frederick Hutt Scholarships [E0319]</b>	
Dr. Frederick B. Hutt, O.A.C. '23 and Professor Emeritus of Animal Genetics at Cornell University offers this scholarship. Application not required.	
<i>Donor(s):</i>	<b>Dr. Frederick B. Hutt</b>
<i>Qualification(s):</i>	Students from Wellington County entering a College of Biological Science program with a minimum admission average of 85%.
<i>Amount:</i>	2 awards of \$700
<b>Gordon McNally Memorial Award [E0203]</b>	
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. Applications by students or recommendations by high school teachers should be made by letter to the Associate Registrar, Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Jean and Peter Gower</b>
<i>Qualification(s):</i>	Students entering any undergraduate program in the College of Biological Sciences. The recipient will be selected on the basis of academic performance and demonstration of outstanding contributions to extracurricular activities and/or community services.
<i>Amount:</i>	1 award of \$500
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>Honours Chemistry Entrance Scholarship [E0130]</b>	
This scholarship will be awarded to the student entering the Honours Chemistry program with the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Faculty of the Department of Chemistry and their scholarship fund</b>
<i>Qualification(s):</i>	Student entering the first semester level of the honours Chemistry program.
<i>Amount:</i>	1 award of \$500
<b>Honours Mathematics or Statistics Scholarship [E0131]</b>	
This scholarship is awarded to the student with the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Faculty of the Department of Mathematics and Statistics, via the C.P.E.S. Scholarship Fund</b>
<i>Qualification(s):</i>	Student entering semester one of the Honours Mathematics or Statistics degree program.
<i>Amount:</i>	1 award of \$500

**Honours Physics Scholarship [E0132]**

Offered by the Department of Physics, these awards will be made based on the student's admission average. A minimum 85% admission average is required to be considered. Application 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 high academic standing 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 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 \$500 - \$6,000

**J.D. MacLachlan Scholarship [E0170]**

Provided by the family of J.D. MacLachlan. Application not required.

*Donor(s):* **The J.D. MacLachlan Trust**

*Qualification(s):* Student entering the University with the highest admission average.

*Amount:* 1 award of \$1,500

**Lincoln Alexander Chancellor's Scholarship [E0493]**

These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

*Donor(s):* **Many Donors**

*Qualification(s):* Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.

*Amount:* 2 awards of \$26,000

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

*Donor(s):* **Wilhelmina McArthur-Humphries Trust Fund**

*Qualification(s):* Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

*Amount:* 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

*Donor(s):* **Paul and Aileen Clarke**

*Qualification(s):* Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

*Amount:* 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

*Donor(s):* **A number of President's Scholarships have been named in honour of the following people and/or donors:**

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):* Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

*Amount:* 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

*Donor(s):* **Mrs. Helen Quinn (O.A.C. '35)**

*Qualification(s):* Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

*Amount:* 1 award of \$1,500

**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. 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. Application not required.

*Donor(s):* **Department of Molecular and Cellular Biology and the estate of the late Robert Orr Lawson**

*Qualification(s):* Student entering the Microbiology major in the B.Sc. program with the highest admission average, providing it is a minimum of 80%. 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 \$4,000, paid in four installments of \$1,000

**Samuel Acker Memorial Scholarship [E0001]**

This scholarship is not tenable with other Senate awards. Application 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 Physical and Engineering Science. Preference may be given to students whose home residence is in either Wellington, Waterloo or Perth County.

*Amount:* 1 award of \$1,000

**The 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 persons. Apply by letter to Student Financial Services by April 1.

*Donor(s):* **Jack and Lillian MacDonald**

*Qualification(s):* In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

*Amount:* 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

*Amount:* Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

*Donor(s):* **University of Guelph Faculty Association**

*Qualification(s):* Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

*Amount:* 1 award of \$2,250

**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 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 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 \$550

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

*Donor(s):* **Ross and Mary Lou Klopp**

*Qualification(s):* Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

*Amount:* 1 award of \$500

**Gary Knechtel Memorial Scholarship [E4500]**

Established by the Toronto Section of the Canadian Institute of Food Science and Technology, with the assistance of the Ontario government's OSOTF program, 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. Academic standing in high school O.A.C. subjects and an interest in Food Science will be used to determine the recipient. Subsequent installments are dependent on continued demonstration of financial need and satisfactory progress in Food Science. Gary Knechtel Memorial Scholarship applications will be mailed to all Food Science major applicants by the Department of Food Science. The application along with a completed Financial Need Assessment Form (N.A.F.) for Entrance Awards are due back to Student Financial Services by May 1. Students are encouraged to 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). ACCESS AWARD. One award of \$10,000 paid in installments of \$2,500 in semesters 1, 3, 5, and 7.

*Donor(s):* **Toronto Section, Canadian Institute of Food Science and Technology**

*Qualification(s):* Students with demonstrated financial need entering the Food Science major in the B.Sc. program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 1 award of \$10,000

**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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc.

**Qualification(s):** Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. 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

**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 continued 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). Deadline to submit the application is May 1. ACCESS AWARD.

**Donor(s):** Department of Molecular and Cellular Biology and the estate of Robert Orr Lawson

**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). This bursary may be held with any other award, except any of the Robert Orr Lawson Scholarships.

**Amount:** 1 award of \$4,000, payable in 4 annual payments of \$1,000

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic merit.

**Amount:** 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

**Donor(s):** Rol-Land Farms

**Qualification(s):** Outstanding entering undergraduate degree students 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 Physical and Engineering Science (beginning with C.P.E.S. in 2000/2001); one award is available to a B.COMM. students, in a major offered by the School of Hospitality 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 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 May 1. ACCESS AWARD

**Donor(s):** The Sleeman Brewing & Malting Company

**Qualification(s):** Full-time entering students registered in the B.Sc. program in the College of Biological Science or the College of Physical and Engineering Science respectively and B.COMM. students, in a major offered by the School of Hospitality and Tourism Management students with a minimum average of 80% in the last year of secondary school 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

**Amount:** 150 awards of \$9,000

**Entrance Awards with Financial Need****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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).

**Donor(s):** W. Roy Hindle and family

**Qualification(s):** An entering O.A.C. degree student who has 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

**Harvey Graham Bursary [E3030]**

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

**Donor(s):** Harvey Graham, O.A.C. '39

**Qualification(s):** Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

**Amount:** 1 award of \$1,700

<b>International Student Entrance Bursaries [E3043]</b>	
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. Students who have applied to the University of Guelph will receive an application form.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
<i>Amount:</i>	Several awards of \$1,000, Several awards of \$3,000

<b>Robert Arthur Stewart Bursaries [E3272]</b>	
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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).	
<i>Donor(s):</i>	<b>The Estate of Mrs. H. Stewart</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	12 awards of \$500

### In-course Scholarships

<b>Alex Peepre Memorial Scholarship [I0232]</b>	
A scholarship established by friends of the late Professor Alex Peepre. In assessing student leadership, activity in student organizations, athletics, teaching assistantships, etc. will be considered. Application not required.	
<i>Donor(s):</i>	<b>Friends of the late Professor Alex Peepre</b>
<i>Qualification(s):</i>	Student entering semesters 7 or 8 in the winter semester in a major offered by the Department of Human Health and Nutritional Sciences (Human Kinetics, Nutritional and Nutraceutical Sciences, or Biomedical Science), who has high academic standing and who displays marked qualities of leadership.
<i>Amount:</i>	1 award of \$500, 1 Framed certificate

<b>Analytical Biochemistry Award [I0281]</b>	
Donated by a faculty member in the Department of Molecular and Cellular Biology and supported by the Alma Mater Fund. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Dr. F.J. Sharom, Department of Biochemistry</b>
<i>Qualification(s):</i>	Students with the highest grades in BIOC*3570 Analytical Biochemistry. One award will be made in each semester that the course is offered. Eligible students must be continuing in an honours major program administered by the Department of Molecular and Cellular Biology.
<i>Amount:</i>	2 awards of \$400

<b>Analytical Toxicology Award [I0465]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Donor wishes anonymity</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$200

<b>Better Beef Scholarship [I0588]</b>	
These scholarships are provided to two students that have selected AGR*4450 Research Project in Agriculture I for their next semester of study. Selection is based on the student's research topic proposal related to meat quality and quality control. Apply by April 1 with a letter, of not more than two pages, outlining proposed research topic to the Chair, Animal and Poultry Science.	
<i>Donor(s):</i>	<b>Better Beef Ltd.</b>
<i>Qualification(s):</i>	BSc.(Agr), BSc.(Food Science), or BSc.(Animal Biology) students that have selected AGR*4450 for their next semester of study.
<i>Amount:</i>	2 awards of \$2,500

<b>Bill Taylor Memorial Scholarship [I0280]</b>	
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>AMF Canada Ltd.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$900

<b>Blackburn Scholarship [I0404]</b>	
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 by April 1.	
<i>Donor(s):</i>	<b>D.J. Blackburn</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500

<b>Bob McCann Memorial Scholarship [C0314]</b>	
This award is presented in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. Edward H. McCann</b>
<i>Qualification(s):</i>	Student commencing semester 8 in honours Wild Life Biology major. The scholarship will be awarded to the student who has completed the 7th semester level with the highest cumulative average in core courses in the Wild Life major.
<i>Amount:</i>	1 award of \$700

<b>Brian L. Walker Memorial Scholarship [I0301]</b>	
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. This scholarship is not tenable with the Dr. Hugh D. Branion Memorial Scholarship. Application not required.	
<i>Donor(s):</i>	<b>Brian Walker Memorial Scholarship Committee</b>
<i>Qualification(s):</i>	Student registered in semester level 8 in B.Sc. Nutrition and Nutraceutical Sciences major in the Winter semester.
<i>Amount:</i>	1 award of \$500

<b>Bruce Sells Medal of Academic Excellence [C0402]</b>	
In honour of Bruce Sells, the Dean of the College of Biological Science, 1983-1995, a silver medal is presented. Application not required.	
<i>Donor(s):</i>	<b>Dr. Bruce Sells and friends</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Silver medal

<b>Bruce W. Minshall Memorial Scholarship [I0450]</b>	
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 to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall</b>
<i>Qualification(s):</i>	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 the student with an interest in crop protection and showing the greatest improvement in academic standing since entering the program.
<i>Amount:</i>	1 award of \$1,000

**Bryant Family Research Scholarship [I0537]**

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 research proposals and one page abstracts to either the Chair of the Department of Integrative Biology by September or January of each year. The successful candidate will be selected by the College of Biological Sciences Awards Committee on the recommendation of the Department of Integrative Biology.

*Donor(s):* **Dr. W. Keith Bryant**

*Qualification(s):* Any undergraduate student enrolled in undergraduate research project courses administered by the Department of Integrative Biology. The student will be judged to have the best proposal for an undergraduate research project and meet a minimum standard of excellence.

*Amount:* 2 awards of \$300

**C.M. and D.J. Switzer Scholarships [I0276]**

Apply by April 1 to Student Financial Services.

*Donor(s):* **C.M. and D.J. Switzer**

*Qualification(s):* One to a student who has completed semester 2 of the Diploma in Agriculture program and one to a student who has completed semester 4 of a degree program in O.A.C. Recipients will have a minimum of 70% standing and have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.

*Amount:* 1 award of \$2,000

**Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]**

Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards Committee by April 1 with a summary of participation in the Ag Ec & Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member.

*Donor(s):* **Canadian Agri-Marketing Association (Ontario)**

*Qualification(s):* Student who has completed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec & Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing.

*Amount:* 1 award of \$1,500

**Canadian Federation of University Women/Guelph Scholarship [I0294]**

The Guelph Chapter of the Canadian Federation of University Women provides this annual scholarship. Application not required.

*Donor(s):* **The Guelph Chapter of the Canadian Federation of University Women**

*Qualification(s):* Female student registered in Year 3 in the Fall semester in either B.Sc.(Eng.), B.A. (College of Physical and Engineering Science) or B.Sc.(College of Physical and Engineering Science) who has the highest cumulative average. Preference will be given to a student who has graduated from a secondary school in Wellington County.

*Amount:* 1 award of \$2,000

**Certified General Accountants Award for Excellence Prize [C0025]**

Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.

*Donor(s):* **Certified General Accountants Association of Ontario**

*Qualification(s):* Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGEC\*2220; Management Accounting AGEC\*2230; and Intermediate Accounting AGEC\*3330.

*Amount:* 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

**CFRU Volunteer Award [I0215]**

Apply to the CFRU Board of Governors by April 30.

*Donor(s):* **Station Manager, CFRU**

*Qualification(s):* Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.

*Amount:* 2 awards of \$250

**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 not required.

*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 not required.

*Donor(s):* **Charles McGowan Memorial Fund**

*Qualification(s):* Outstanding graduating student in an O.A.C. degree program.

*Amount:* 1 award of \$300

**Chemical Institute of Canada Prize (CIC) Silver Medal in Biochemistry [I0056]**

Awarded in the Winter semester. Application 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]**

Donated by the Chemistry Club, together with the Dean of C.P.E.S.. Applicants should submit a one-page type-written summary outlining their efforts to promote the disciplines of chemistry within the University, or the community to the Executive of the Chemistry Club by February 1st.

*Donor(s):* **The Chemistry Club**

*Qualification(s):* Student at any semester level enrolled in a degree program administered by the Department of Chemistry, who has made a significant contribution to promotion of chemistry.

*Amount:* 1 award of \$200

**Class of '51 O.A.C. Leadership Awards [C0063]**

Established by Year '51 O.A.C., on the occasion of its 45th anniversary. At the discretion of the O.A.C. Awards Committee students may be selected before graduation. Application not required.

*Donor(s):* **Year '51 O.A.C.**

*Qualification(s):* Students graduating from the degree program in a major in an O.A.C. department who have a 70% standing in the final year of study and who have demonstrated leadership in the College or University extracurricular activities.

*Amount:* 4 awards of \$1,000

**Class of '67 O.A.C. Centennial Scholarship [I0067]**

Apply to Student Financial Services by April 1.

*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:* 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 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

**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 not required. One award of a gold medal and \$200.

*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 \$200, 1 Gold Medal

<b>College of Biological Science Roll of Distinction [I0000]</b>	
Application not required.	
<i>Donor(s):</i>	<b>College of Biological Science</b>
<i>Qualification(s):</i>	Awarded to full-time students who have completed 5 semesters, and who have a cumulative average of 85% up to the semester of consideration for the award. Part-time students who have completed semester 5 and have taken at least 2 courses per semester over consecutive semesters, are also eligible.
<i>Amount:</i>	1 Certificate
<b>College of Physical Engineering Science Academic Scholarship [I0073]</b>	
Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Offered in the Winter semester to students who have completed at least 15.0 course credits in a College of Physical and Engineering Science program and have excellent grades but have not received awards recently.
<i>Amount:</i>	2 awards of \$250
<b>College of Physical Engineering Science Graduation Prize [C0075]</b>	
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application not required. One award of \$250 and a commemorative plaque.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Student graduating with the highest cumulative average from an honours B.Sc. program in a Physical and Engineering Science area.
<i>Amount:</i>	1 award of \$250, 1 Commemorative plaque
<b>College of Physical Engineering Science Scholarship [I0076]</b>	
Awarded in the Fall semester to a student who has completed semester 6 in the previous Fall, Winter or Spring semesters and who is enrolled in Year 4 of a College of Physical and Engineering Science program. Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Recipients will be selected on the basis of a high average (minimum 80% average required) in courses normally taken in Year 3.
<i>Amount:</i>	1 award of \$250
<b>College of Social Science Alumni Heritage In-Course Scholarships [I0492]</b>	
Established in recognition of the valuable contributions made over many years by College of Social Science alumni and the Alumni Association to the life and vitality of the University. Awarded in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>College of Social Science Alumni</b>
<i>Qualification(s):</i>	Students registered in the C.S.A.H.S. with the highest cumulative program average of at least 80.0% who have completed between 10.00 and 12.50 course credits and who registered in C.S.A.H.S. in the subsequent Fall Semester. One scholarship will be awarded to a full or part-time student registered in a program offered by each of the following six C.S.A.H.S. administrative and academic units: Economics, Geography, International Development Studies, Political Science, Psychology and Sociology and Anthropology. This scholarship may be held once only.
<i>Amount:</i>	6 awards of \$1,000
<b>Collins Barrow Award [I0040]</b>	
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i>	Student with the highest grade in course AGEK*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i>	1 award of \$500
<b>Copernicus Scholarship in Physics [I0081]</b>	
Application not required.	
<i>Donor(s):</i>	<b>The faculty members of the Department of Physics through their Scholarship Trust Fund</b>
<i>Qualification(s):</i>	Students who have completed 7.5 course credits and are registered in one of the majors programs in Physics. To be eligible, students must have completed the courses PHYS*2440 and PHYS*2460 with a minimum of an A average. The awards will be made to the students with the highest average in the Physics courses taken in the Year 1 and in PHYS*2440 and PHYS*2460.
<i>Amount:</i>	4 awards of \$500

<b>CSAHS Student Volunteer Scholarship [I0482]</b>	
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. Applications are available from the CSAHS Dean's Office. Apply to the CSAHS Dean's Office with a completed application form, 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, and 2 letters of recommendation by April 1. This scholarship will be awarded to the Student Volunteer of the year to help defray the costs associated with volunteerism. One award of \$350 (an equal amount will be awarded to the charitable organization of the recipient's choice).	
<i>Donor(s):</i>	<b>Harshman Fellowship Society and Pfizer Canada Inc.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$350
<b>David F. Boyes Apiculture Scholarship [I0031]</b>	
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.	
<i>Donor(s):</i>	<b>The Apiculture Club</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$150
<b>Deans' Scholarships [I0323]</b>	
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i>	150 awards of \$1,000
<b>Dr. Caesar V. Senoff Memorial Scholarship for Excellence in Chemistry [I0517]</b>	
The Senoff family and the College of Physical and Engineering Science, 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. Application not required.	
<i>Donor(s):</i>	<b>Senoff family and the College of Physical and Engineering Science, together with the University of Guelph Faculty Association and friends</b>
<i>Qualification(s):</i>	Student majoring in any Chemistry program who has completed between 7.5 and 9.75 credits and who has the highest cumulative average over 80%.
<i>Amount:</i>	1 award of \$500
<b>Dr. Charles Capstick Graduation Prize [C0558]</b>	
Provided by the Department of Computing and Information Science, these scholarships are awarded in May to students who have completed an undergraduate degree in a Computing and Information Science program and have achieved the highest and second highest cumulative averages at graduation. Application not required.	
<i>Donor(s):</i>	<b>Department of Computing and Information Science</b>
<i>Qualification(s):</i>	Students who have completed an undergraduate degree in Computing and Information Science (CIS) in the previous twelve months.
<i>Amount:</i>	1 award of \$500, 1 award of \$300
<b>Dr. James Linders Scholarship [I0559]</b>	
Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 3 Computing and Information Science core courses. Application not required.	
<i>Donor(s):</i>	<b>Department of Computing and Information Science</b>
<i>Qualification(s):</i>	Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 15.0 to 17.5 course credits and have taken the CIS core courses required for Year 3.
<i>Amount:</i>	1 award of \$500, 1 award of \$300

**Dr. Mary McLeish Scholarship [I0560]**

Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 1 Computing and Information Science core courses. Application not required.

*Donor(s):* **Department of Computing and Information Science**

*Qualification(s):* Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 5.0 to 7.5 course credits and have taken the CIS core courses required for Year 1.

*Amount:* 1 award of \$500, 1 award of \$300

**Dr. Ted Swart Scholarship [I0561]**

Provided by the Department of Computing and Information Science, these scholarships are awarded in the Fall semester to students in a Computing and Information Science degree program that achieved the highest and second highest averages in Year 2 Computing and Information Science core courses. Application not required.

*Donor(s):* **Department of Computing and Information Science**

*Qualification(s):* Undergraduate students in a Computing and Information Science (CIS) degree program who have completed from 10.0 to 12.5 course credits and have taken the CIS core courses required for Year 2.

*Amount:* 1 award of \$500, 1 award of \$300

**E.B. MacNaughton Convocation Prize [C0171]**

Established by the College of Physical and Engineering Science to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application not required. One award of a plaque-mounted medal and \$250.

*Donor(s):* **The College of Physical and Engineering Science**

*Qualification(s):* The College of Physical and Engineering Science nominee for the Winegard Medal.

*Amount:* 1 award of \$250, 1 Plaque-mounted medal

**Egelstaff Scholarship [I0397]**

In honour of University Professor Emeritus and former Chair of the Department of Physics, Peter A. Egelstaff. Awarded in the Winter semester. Application 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 \$500

**Ellen Nilsen Memorial Award [I0047]**

Offered by the friends of Ellen Nilsen. Apply to the Director of the Collaborative International Development Studies Programme, Rm 702 MacKinnon Building, by October 7.

*Donor(s):* **The Friends of Ellen Nilsen**

*Qualification(s):* Academically outstanding woman from a developing country who is registered at the University of Guelph in an undergraduate or a graduate program and who has demonstrated a commitment to social change.

*Amount:* 1 award of \$1,500

**Evelyn Matheson Pepper Memorial Scholarship [I0538]**

The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.

*Donor(s):* **Ms. Barbara Stuart and Ms. Susan Pepper**

*Qualification(s):* Student who achieves the highest grade in the course FRHD\*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.

*Amount:* 1 award of \$1,000

**Firmenich of Canada Millenium Scholarship in Food Science [I0466]**

Established by Firmenich Canada Limited, a food ingredient company. Apply to Student Financial Services including a covering letter outlining eligibility and related experiences by April 1

*Donor(s):* **Steven Oliver**

*Qualification(s):* Student majoring in Food Science who has completed 10.00 credits and has a minimum cumulative average of 75%. Eligible students must have demonstrated creativity in the Food Science classes and have made a significant contribution to the department, the University and the Guelph community through extracurricular activities.

*Amount:* 1 award of \$1,000

**Fisher Scientific Scholarship in Biochemistry [I0600]**

Selection will be based on high academic achievement. The recipient shall not concurrently hold another award of \$1,000 or more in value. A student may be considered for this award only once. Application not required.

*Donor(s):* **Fisher Scientific**

*Qualification(s):* Students enrolled in the Biochemistry Honours program or the Biochemistry Co-op program who have completed a minimum of 7.5 credits up to a maximum of 9.75 credits at the end of the fall semester.

*Amount:* 1 award of \$500

**Floyd Roadhouse Prize in Analytical Chemistry [I0247]**

Presented in the Winter semester. Application not required.

*Donor(s):* **Colleagues, students and friends of Professor F.E.B. Roadhouse**

*Qualification(s):* Student with the highest grade in CHEM\*2400 Analytical Chemistry I in the previous calendar year, who is continuing in an honours major program administered by the Department of Chemistry. In the event of a tie, laboratory performance will be considered.

*Amount:* 1 award of \$200

**Francis E. Chase Memorial Scholarship [I0055]**

Awarded in the Fall semester. The award will be made on the basis of academic standing, leadership in extracurricular activities. Apply to Student Financial Services by April 1.

*Donor(s):* **Mrs. Jane M. Chase**

*Qualification(s):* Student who has completed semesters 4 or 6 of the B.Sc. program majoring in Food Science.

*Amount:* 1 award of \$450

**Frank and Gertraude Hurnik Scholarship [I0455]**

Provided by Dr. Frank Hurnik, Professor Emeritus, and faculty member in Animal and Poultry Science 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 Chair, Animal and Poultry Science, by February 1 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.

*Donor(s):* **Dr. Frank Hurnik**

*Qualification(s):* O.A.C. undergraduate or graduate students 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 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 \$1,000, and a Medal

**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 not required. One award of a medal and a maximum of \$500.

*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 \$500, 1 Medal

**George A. Farley Scholarship [I0099]**

Established in memory of George A. Farley, a chemistry graduate of the Class O.A.C.'33, and presented in the Winter semester. Application not required.

*Donor(s):* **James M. Farley**

*Qualification(s):* Student enrolled in a Co-op program administered by the Department of Chemistry and who has completed their second work term within the preceding calendar year. Work term reports, work term assessments and course grades will be considered. The student must have a cumulative average of at least 80%.

*Amount:* 1 award of \$250

**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. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Mrs. George A. Gray**

*Qualification(s):* Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**George I. Christie Scholarship [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. Applications approved by the Chair, Department of Animal and Poultry Science, should be submitted to the O.A.C. Dean's office by April 1.

*Donor(s):* **Trust Fund (late President George I. Christie)**

*Qualification(s):* Awarded to a student graduating with high standing in an animal and poultry science courses who proposes to pursue graduate studies in animal science at any institution of his/her choice.

*Amount:* 1 award of \$800

**GIBCO/BRL Microbiology Research Excellence Award [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 all round research project in MICR\*4310 and/or MICR\*4320 Research Project I and/or II in Microbiology.

*Amount:* 1 award of \$500

**GlobalTox Award for Academic Excellence [I0135]**

GlobalTox International Consultants Inc. offers this award. Application not required.

*Donor(s):* **GlobaTox International Consultants Inc.**

*Qualification(s):* Student who is registered in the honours toxicology program and has the highest grade in Principles of Toxicology (TOX\*2000).

*Amount:* 1 award of \$500

**Gonder Family Centre for Students with Disabilities Volunteer Award [I0563]**

In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Centre for Students with Disabilities (CSD) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the CSD. The award will be made on the basis of the volunteer activities undertaken by the student at the CSD, 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 CSD (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 CSD.

*Amount:* 1 award of \$900

**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 CSAHS major of the B.Comm. program. Application not required.

*Donor(s):* **Dr. John and Mrs. Katherine Gonder**

*Qualification(s):* All students in the CSAHS 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 Centre for Students with Disabilities.

*Amount:* 1 award of \$900

**Governor General's Medal [C0044]**

Established by the Office of the Governor General of Canada. Application 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:* 1 Silver medal

**Greg Muir Memorial Scholarship [I0196]**

The Greig Muir Memorial Scholarship is awarded by Champlain Industries of Stanbridge Station, Quebec, to a Food Science student in the B.Sc. program. Preference will be given to students entering semester 3 who are from the Province of Quebec. If there is no candidate in semester 3 from the Province of Quebec a candidate will be sought from semester 5. Apply to Student Financial Services by April 1.

*Donor(s):* **Champlain Industries Ltd.**

*Qualification(s):* B.Sc. Food Science students on the basis of academic standing and participation in extracurricular activities.

*Amount:* 1 award of \$1,000

**Guelph Soap Company Scholarship [I0288]**

The Guelph Soap Company donates this scholarship towards tuition fees, which is awarded in the Winter semester. Application not required.

*Donor(s):* **Tricorp Chemical Specialties**

*Qualification(s):* Student enrolled in the organic chemistry courses CHEM\*3750 and CHEM\*3760 during the previous calendar year who has obtained the highest average in one Biochemistry course and two Organic Chemistry courses, and who is continuing in an honours major program administered by the Department of Chemistry.

*Amount:* 1 award of \$1,200

**H. Boyd Scholarship [I0335]**

Established by the friends of Professor W.H. Boyd. Application not required. Awarded in the Winter semester.

*Donor(s):* **Douglas L. Woolley, M.D. & B.Sc. 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 \$1,000

**H.O. Shackleton Memorial Scholarship [C0255]**

Interested students should apply to the Chair of the Department of Molecular and Cellular Biology by April 1, in order to be considered for this scholarship.

*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. 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.

*Amount:* 1 award of \$500

**Highdale Farms Scholarship [I0348]**

Apply to Student Financial Services, by April 1.

*Donor(s):* **Arthur Spoerri**

*Qualification(s):* Two awards are available for students in semesters 3 through 6 with at least a 75% cumulative average and whose primary area of study is related to the natural sciences. The first award is based on academic proficiency. The second award is based on academic proficiency and demonstrated leadership with preference given to students from Ottawa-Carleton, Dundas-Glenarry-Stormont, Grenville, Lanark, Prescott-Russell and Renfrew counties.

*Amount:* 2 awards of \$2,500

**HK/HB Alumni Association Graduation Prize [C0452]**

Provided by the HK/HB Alumni Association. Awarded in the Spring semester. Application not required.

*Donor(s):* **The HK/HB Alumni Association**

*Qualification(s):* Student graduating from the Human Kinetics major in the Department of Human Health and Nutritional Sciences, with at least a B cumulative average. Selection by the College of Biological Science, on the recommendation of the departmental awards committee. 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.). Nominations from faculty and students are submitted to the department by February 1st each year for students graduating in the subsequent June convocation or for students who graduated in the previous February or October convocations. Nominators should provide a two page summary of why they are nominating the candidate.

*Amount:* 1 award of \$250

**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 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:* 1 award of \$500

**Honours Chemistry Scholarship [I0129]**

This scholarship is donated by the faculty of the Department of Chemistry through their scholarship trust fund and is awarded annually in the Winter semester. Application not required.

*Donor(s):* **Faculty of the Department of Chemistry**

*Qualification(s):* Student who is enrolled in the B.Sc. honours Chemistry program who completed semester 4 in the previous calendar year, and has achieved the highest cumulative average over four semesters, providing that at least 3.00 credits offered by the Department of Chemistry have been taken.

*Amount:* 1 award of \$1,000

**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 not required.

*Donor(s):* **Friends of Dr. Hugh Branion**

*Qualification(s):* Student registered in semester level 8 in B.Sc. Nutritional and Nutraceutical Sciences major in the winter semester.

*Amount:* 1 award of \$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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

*Donor(s):* **International Student Organization (ISO)**

*Qualification(s):* Full-time International 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 75%, and is registered at the time of application.

*Amount:* 1 award of \$1,000

**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 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 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 Medal

**J.D. Cunningham Industrial Scholarship [I0287]**

Apply to Student Financial Services by April 1.

*Donor(s):* **J.D. Cunningham**

*Qualification(s):* Awarded to a student with a minimum cumulative average of 75% who has completed semester 6 in Food Science. Work experience in industrial microbiology, participation in extracurricular activities and demonstrated leadership skills are also considered.

*Amount:* 1 award of \$900

**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 Physical and Engineering Science from 1987 to 1995. Application 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 \$500

**J.M. Christie Prize [C0213]**

Application 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 Plaque

**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 February 1st to the Chair, Department of Human Health and Nutritional Sciences, with a letter outlining leadership contributions to the University and the community. Awarded in the Winter semester.

*Donor(s):* **HK/HB Alumni Association**

*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 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 \$1,500

<b>James L. Mottin Award for Academic and Extracurricular Excellence [C0344]</b>	
Provided by the Department of Psychology to recognize its nominee for the Winegard Medal. Apply to the Department of Psychology Undergraduate Academic Counsellor by January 15th, including a list of extracurricular activities.	
<i>Donor(s):</i>	<b>The Department of Psychology</b>
<i>Qualification(s):</i>	Student must be enrolled in the B.A. Honours program or the honours specialization in the B.Sc. program majoring in Psychology. The recipient will be selected on the basis of high academic achievement and extracurricular involvement.
<i>Amount:</i>	1 award of \$200

<b>Jean Carter Memorial Gerontology Scholarship [I0488]</b>	
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 letter to the CSAHS Undergraduate Awards Committee, Dean's Office by April 1st, including a statement that outlines the student's experience working with the elderly in a volunteer capacity as well as extracurricular involvement the student may have and two letters of reference, one of which should be from someone who can speak to the student's volunteer experiences with the elderly, while the other should comment on the extracurricular activities of the student.	
<i>Donor(s):</i>	<b>Mr. Robert N. Carter and Family</b>
<i>Qualification(s):</i>	Undergraduate student in the CSAHS who has completed at least 10.0 credits with a minimum 70% cumulative average and has made a significant contribution to the care of the elderly. Preference will be given to students in the BASc program majoring in Gerontology.
<i>Amount:</i>	1 award of \$1,000

<b>Jim Stokman Memorial Scholarship [I0386]</b>	
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 to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Mrs. Jim Stokman</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$600

<b>John A. Archibald Memorial Scholarship [I0014]</b>	
Awarded in memory of John A. Archibald, former Director of the Horticultural Research Institute of Ontario. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>The friends and associates of the late John A. Archibald</b>
<i>Qualification(s):</i>	Outstanding student with an interest in courses in the Department of Land Resource Science who has completed semester 6. The recipient will be chosen on the basis both of high academic standing and participation in extracurricular activities.
<i>Amount:</i>	1 award of \$1,200

<b>John Eccles Scholarship [I0093]</b>	
Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Student Housing Services</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$600

<b>John T. Powell Scholarship [I0237]</b>	
Apply to the Department of Human Health and Nutritional Sciences (H.H.N.S.) main office by February 15 with a letter outlining participation in extra-curricular on campus activity and contributions made to the annual HHNS Symposium at the organizational and/or operational level.	
<i>Donor(s):</i>	<b>Human Kinetics Alumni Association</b>
<i>Qualification(s):</i>	Full-time students enrolled in any honours 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.
<i>Amount:</i>	1 award of \$500

<b>Kae and Gordon Skinner Memorial Scholarship [C0258]</b>	
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 Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>The estates of the late Mr. and Mrs. A.G. Skinner</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$750

<b>Kenneth James Berg Memorial Scholarship [I0370]</b>	
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 work force. Nomination by the Microbiology Co-op Program Committee. Application not required.	
<i>Donor(s):</i>	<b>Family and friends of Ken Berg</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

<b>Kenneth W. Hammond Award [I0045]</b>	
The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.	
<i>Donor(s):</i>	<b>Kenneth W. Hammond</b>
<i>Qualification(s):</i>	Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.
<i>Amount:</i>	1 award of \$1,000

<b>Kip Hunter Prize [I0139]</b>	
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 the end of the 12th week of the Winter semester.	
<i>Donor(s):</i>	<b>Faculty, students and staff of the Philosophy Department</b>
<i>Qualification(s):</i>	Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
<i>Amount:</i>	1 Book prize

<b>Lambda Foundation Scholarship in LBGT Studies [I0591]</b>	
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.	
<i>Donor(s):</i>	<b>Lambda Foundation and other donors</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

<b>Land Resource Science Academic Scholarship [C0425]</b>	
Provided by the Land Resource Science Endowment fund. Application not required.	
<i>Donor(s):</i>	<b>Provided by the Land Resource Science Endowment Fund</b>
<i>Qualification(s):</i>	Student graduating from any major in the department with the highest cumulative average.
<i>Amount:</i>	1 award of \$1,000

<b>Land Resource Science Achievement Scholarship [C0426]</b>	
Provided by the Land Resource Science Endowment fund. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Provided by the Land Resource Science Endowment Fund</b>
<i>Qualification(s):</i>	Student graduating from any major in the department with a minimum cumulative average of 70%. Preference will be given to students contributing to student life on campus and/or community activities.
<i>Amount:</i>	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. Application not required.

**Donor(s):** Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues

**Qualification(s):** Student in C.P.E.S. with the highest average grade in CHEM\*1040,1050 and 2700 who has completed a minimum of 10.0 credits up to a maximum of 14.75 credits.

**Amount:** 1 award of \$1,000

**Leibniz/Newton Scholarship [I0156]**

Established in honour of two founding fathers of calculus. Awarded in the Fall semester. Not tenable with the T.D. Newton Memorial Scholarship. Application not required.

**Donor(s):** The Department of Mathematics and Statistics

**Qualification(s):** A second year student majoring in mathematics or statistics (i.e. one who has completed a minimum of 5 credits up to a maximum of 9.75 credits) who has a cumulative average of at least 80% and the highest grades over 80% in MATH\*1200 and MATH\*1210. A student may be considered for this award only once.

**Amount:** 1 award of \$500

**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.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Conolly

**Qualification(s):** Full-time visiting exchange undergraduate or graduate 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). 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.

**Amount:** 1 award of \$1,000

**Lionel Bradley Pett Scholarships [I0486]**

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 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

**MacKenzie Scholarship [I0398]**

In honour of University Professor Emeritus Innes K. MacKenzie. Not tenable with the Egelstaff Scholarship. Application 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 \$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. Awarded in the Winter semester. Application 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 \$500

**Mae McEwen Memorial Scholarship [I0185]**

Apply to Student Financial Services, by April 1.

**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 \$1,200

**Maple Leaf Foods Inc. Shur-Gain Scholarship [I0307]**

Provided by Shur-Gain, a member of Maple Leaf Foods Inc. Apply to Student Financial Services by April 1.

**Donor(s):** Shur-Gain

**Qualification(s):** Undergraduate in Animal Science or Animal Biology who has high academic standing during the first 4 semesters and is continuing in that program. Positive evidence of leadership and contribution to university and/or community life are also given strong consideration.

**Amount:** 1 award of \$750

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

**Donor(s):** TBA

**Qualification(s):** The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

**Amount:** 3 awards of \$250

**Mathematics Graduation Prize [C0182]**

Awarded at Summer Convocation. Application not required. One award of \$250 and a commemorative plaque.

**Donor(s):** Faculty members, who will be anonymous, through the College of Physical Science and Engineering Expendable Scholarship Fund

**Qualification(s):** The graduating student who has majored in mathematics and who in the past year has graduated from an honours degree program with the highest cumulative average over 80%.

**Amount:** 1 award of \$250

**McCormick Canada Inc. Food Science Scholarship [I0410]**

Provided by McCormick Canada Inc. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

**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

**Michael DiGirolamo Scholarship [I0571]**

Established in memory of Michael DiGirolamo, a second year biology student, who passed away in 2004. Michael was very involved in student activities and was recruited as a TA in Italian Studies while at the University. Preference will be given to students with an active interest in language studies. Selection will be based on a combination of academic achievement and demonstrated active involvement in student activities. Apply by April 1 to the O.A.C. Awards Committee with a letter of no more than two pages outlining involvement in student life and active interest in language studies.

**Donor(s):** Friends and family of Michael DiGirolamo

**Qualification(s):** Students majoring in Animal Biology with a minimum cumulative average of B+, and a minimum 10.0 course credits completed.

**Amount:** 1000 awards of \$1

**Monroe Landon Memorial Scholarship [C0153]**

Preference will be given to a student residing in the region of Haldimand Norfolk. Apply by letter, with a transcript, to the Chair, Department of Integrative Biology by January 31 indicating experience in the field of botany/conservation.

**Donor(s):** The friends of Monroe Landon

**Qualification(s):** Students that have completed a minimum of 17.0 credits in honours Plant Biology or Ecology with a minimum cumulative average of 70% and demonstrates an active interest in the conservation of native species and field research.

**Amount:** 1 award of \$550

<b>O.A.C. '55 Scholarships [I0064]</b>
<p>Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.</p> <p><i>Donor(s):</i> <b>O.A.C. '55</b></p> <p><i>Qualification(s):</i> Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.</p> <p><i>Amount:</i> 1 award of \$2,000</p>
<b>O.A.C. Centennial Graduate Fellowships [C0209]</b>
<p>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 Student Financial Services by April 1.</p> <p><i>Donor(s):</i> <b>Dean, O.A.C.</b></p> <p><i>Qualification(s):</i> 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 are eligible for these fellowships. 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.</p> <p><i>Amount:</i> 2 awards of \$2,200</p>
<b>O.A.C. Students' Federation Medal [C0217]</b>
<p>Application not required.</p> <p><i>Donor(s):</i> <b>O.A.C.</b></p> <p><i>Qualification(s):</i> 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.</p> <p><i>Amount:</i> 1 Medal</p>
<b>Ontario Dairy Council Scholarship [C0221]</b>
<p>The Ontario Dairy Council offers this scholarship in honour of the late P. Bruce Scott. Application not required.</p> <p><i>Donor(s):</i> <b>Ontario Milk Distributors' Association</b></p> <p><i>Qualification(s):</i> Student who shows proficiency in courses related to the market milk industry at the conclusion of the 8th semester level of the Food Science program.</p> <p><i>Amount:</i> 1 award of \$1,000</p>
<b>Ontario Food Processors Association Scholarship [C0222]</b>
<p>This award is offered by Ontario Food Processors' Association. Application not required.</p> <p><i>Donor(s):</i> <b>Ontario Food Processors' Association</b></p> <p><i>Qualification(s):</i> Most outstanding student of the graduating class of Food Science major who has shown proficiency in courses related to food processing.</p> <p><i>Amount:</i> 1 award of \$1,000</p>
<b>Ontario Food Protection Association Scholarship [I0223]</b>
<p>Apply to Student Financial Services by April 1.</p> <p><i>Donor(s):</i> <b>Ontario Food Protection Association</b></p> <p><i>Qualification(s):</i> Student majoring in Food Science entering the 7th semester with a minimum cumulative standing of 70%. Priority will be given to students who have demonstrated academic proficiency in quality assurance, and who have participated in extra curricular activities.</p> <p><i>Amount:</i> 1 award of \$1,000</p>
<b>Oxford County Pork Producers Scholarship (Degree) [I0531]</b>
<p>The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.</p> <p><i>Donor(s):</i> <b>Oxford County Pork Producers</b></p> <p><i>Qualification(s):</i> Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.</p> <p><i>Amount:</i> 1 award of \$1,000</p>

<b>Peter Mann Award for Embryology [I2032]</b>
<p>Provided by colleagues and friends of Dr. Mann, a scholar and teacher of Embryology from 1954-1987. Application not required.</p> <p><i>Donor(s):</i> <b>Colleagues and friends of Dr. Mann</b></p> <p><i>Qualification(s):</i> Student from any degree program completing the course BIOM*3040 (Biomedical Embryology), with the highest academic standing.</p> <p><i>Amount:</i> 1 award of a book prize (approx. value \$100)</p>
<b>Pharmacia &amp; Upjohn Award in Microbiology [I0295]</b>
<p>Offered in the Winter Semester by the Pharmacia Company of Canada. Not tenable with the Shutt Memorial Scholarship. Application not required.</p> <p><i>Donor(s):</i> <b>Pharmacia &amp; Upjohn International Inc.</b></p> <p><i>Qualification(s):</i> Student enrolled in the B.Sc. Microbiology major who has completed the 7th semester level with the highest cumulative average in those core courses offered by the Department of Molecular and Cellular Biology.</p> <p><i>Amount:</i> 1 award of \$500</p>
<b>Priscilla and Stanford Reid Trust Prize [I0597]</b>
<p>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.</p> <p><i>Donor(s):</i> <b>Priscilla and Stanford Reid Trust Fund</b></p> <p><i>Qualification(s):</i> Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.</p> <p><i>Amount:</i> 1 award of \$500</p>
<b>Psychology Core and Methodology Scholarship [I0345]</b>
<p>Provided by the Department of Psychology. Application not required.</p> <p><i>Donor(s):</i> <b>The Department of Psychology</b></p> <p><i>Qualification(s):</i> 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.</p> <p><i>Amount:</i> 1 award of \$200</p>
<b>Psychology Honours Thesis Prize [I0343]</b>
<p>Provided by the Department of Psychology. Application not required.</p> <p><i>Donor(s):</i> <b>The Department of Psychology</b></p> <p><i>Qualification(s):</i> Student enrolled in the B.A. honours program or the honours specialization in the B.Sc. program majoring in Psychology who has completed PSYC*4870 and PSYC*4880 and who submits the best Psychology honours thesis in the previous Fall, Summer or Winter semesters. The winning thesis is selected from nominations by thesis supervisors.</p> <p><i>Amount:</i> 1 award of \$200</p>
<b>Psychology Senior Honours Prize [I0342]</b>
<p>Provided by the Department of Psychology. Application not required.</p> <p><i>Donor(s):</i> <b>Department of Psychology</b></p> <p><i>Qualification(s):</i> Student enrolled in the BA Honours program or the honours specialization in the BSc program majoring in Psychology, having the highest cumulative specialization average after completing at least 15.0 course credits, including those prerequisite courses associated with the honours thesis PSYC*3370. Award may be held once only.</p> <p><i>Amount:</i> 1 award of \$200</p>
<b>R.A. Fisher Statistics Scholarship [I0102]</b>
<p>Established to honour one of the founding fathers of statistics. Awarded in the Fall semester. Not tenable with the Year 3 Statistics Scholarship. Application not required.</p> <p><i>Donor(s):</i> <b>Faculty, students and other affiliates of the Department of Mathematics and Statistics</b></p> <p><i>Qualification(s):</i> Student majoring in statistics in year three (i.e. one who has completed a minimum of 10.00 credits up to a maximum of 14.75 credits) who has a cumulative average of at least 80% and the highest grades over 80% in STAT*2040 and STAT*2050 or equivalent. A student may be considered for this award once only.</p> <p><i>Amount:</i> 1 award of \$500</p>

**R.C. Moffatt Memorial Scholarship in Mathematics or Statistics [I0536]**

This scholarship was established by the Estate of Professor R.C. Moffatt. A student may be considered for this award in both third and fourth years. This award is not tenable with any other Department of Mathematics or Statistics scholarships . Application not required.

*Donor(s):* **Estate of Professor R.C. Moffatt**

*Qualification(s):* Student in year 3 or 4 (i.e., who has completed a minimum of 10.0 credits up to a maximum of 19.75 credits) enrolled as a statistics or mathematics major. The recipient will be selected on the basis of a high cumulative average over 80%.

*Amount:* 1 award of \$900

**R.C. Moffatt Memorial Scholarship in Physics [I0535]**

This scholarship is awarded in the winter semester to the student with the highest cumulative average over 80%. This award is not tenable with any other Department of Physics scholarships . Application 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 \$900

**Robert Harcourt Scholarships [I0121]**

This fund was established by the late Mrs. R. Harcourt in honour of the late Dr. Robert Harcourt. Application not required.

*Donor(s):* **Established by the late Mrs. R. Harcourt in honour of the late Dr. Robert Harcourt**

*Qualification(s):* Students who have completed the 4th or 6th semester levels with an interest in courses in the Department of Land Resource Science.

*Amount:* 2 awards of \$1,250

**Robert Orr Lawson Second Year Microbiology In-course Scholarship [I0498]**

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 April 1 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 [I0499]**

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 April 1 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 four 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

**Roche Award in Molecular Biology and Genetics [C0030]**

Application not required.

*Donor(s):* **Roche Diagnostics**

*Qualification(s):* The award will be given to the student with the highest cumulative average who convoked during the fall or winter semesters or will be convoking in the summer of the current academic year from the Bachelor of Science, Molecular Biology and Genetics major.

*Amount:* 1 award of \$500

**Ronald Ko Scholarship [I0151]**

This scholarship represents income generated by a trust fund established by Dr. Ko. One annual award is presented in the Winter semester. Application not required.

*Donor(s):* **Dr. Ronald Ko, Department of Integrative Biology, University of Hong Kong**

*Qualification(s):* Student with the highest grade in the Wild Life Parasitology course (ZOO\*3010) in the Department of Integrative Biology, currently offered in the Fall semester.

*Amount:* 1 award of \$500

**Sharon Marshall Memorial Prize [C0448]**

Established by the family in memory of their daughter, Sharon Marshall, an undergraduate student from 1994-1997. Awarded by the College of Biological Science Awards Committee on the recommendation of the Plant Biology Council. Application not required.

*Donor(s):* **The family of Sharon Marshall**

*Qualification(s):* Student graduating in the Plant Biology major with the highest cumulative average.

*Amount:* 1 award of \$100, 1 Plaque

**Shutt Memorial Scholarship [I0257]**

In honour of Professor D.B. Shutt and Dr. F.T. Shutt. Not tenable with the Upjohn Award. Application 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

**Smucker Foods of Canada Graduation Award [C0248]**

Apply to the Chair, Department of Food Science by April 1 with a letter, of not more than two pages, outlining your extracurricular activities and involvement in the university, college, and community.

*Donor(s):* **Smucker Foods of Canada**

*Qualification(s):* Graduating student in the Food Science major with a minimum 85% cumulative average with participation in extracurricular and demonstrated leadership qualities.

*Amount:* 1 award of \$500

**Smucker Foods of Canada Scholarship [I0363]**

Apply to the Chair, Department of Food Science by April 1 with a letter, of not more than two pages, outlining your extracurricular activities and involvement in the university, college, and community.

*Donor(s):* **Smucker Food of Canada**

*Qualification(s):* Students majoring in Food Science who have completed 10.0 credits with a minimum 85% cumulative average and a record of participation in extracurricular activities and demonstrated leadership qualities.

*Amount:* 1 award of \$500

**Society of Chemical Industries Prizes in Biochemistry [C0478]**

Application not required.

*Donor(s):* **Society of Chemical Industry**

*Qualification(s):* Students who have convoked from the Biochemistry Honours program or the Biochemistry Co-op program during the fall or winter semesters or will be convoking in the summer of the current academic year with the highest cumulative average.

*Amount:* 1 Gold Key

**Society of Chemical Industries Prizes in Chemistry/Applied Pharmaceutical Chemistry [C0333]**

Application not required.

*Donor(s):* **Society of Chemical Industry**

*Qualification(s):* Students who obtain the highest standing in the final year in each of the B.Sc. honours major Chemistry and the B.Sc.(Tech.) honours major Applied Pharmaceutical Chemistry.

*Amount:* 2 Engraved plaques

<b>Society of Management Accountants of Ontario Scholarship [C0268]</b>	
The scholarship will be awarded at summer convocation. Application not required. One award of \$500 and a free course enrolment in the first complete CMA subject enrolled in the Society's program.	
<i>Donor(s):</i>	<b>Society of Management Accountants, Grand River Chapter</b>
<i>Qualification(s):</i>	Full-time student graduating from B.Comm., B.A. (minor in Business Administration), or B.Sc. (minor in Business Administration), or B.Sc.(Agr.) (major in Agriculture Business or Food Agriculture and Resource Economics), programs. Student with the highest average in the 2 courses Financial Accounting AGECE*2220 and Intermediate Accounting AGECE*3330.
<i>Amount:</i>	1 award of \$500, and a free course enrolment in the first complete CMA subject enrolled in the Society's program
<b>Statistics Graduation Prize [C0508]</b>	
Awarded at Summer Convocation. Application not required. One award of \$250 and a commemorative plaque.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	The graduating student who has majored in statistics and who in the past year has graduated from an honours degree program with the highest cumulative average over 80%.
<i>Amount:</i>	1 award of \$250, 1 Commemorative plaque
<b>Stephanie Wilken Volunteer Award [I0449]</b>	
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.	
<i>Donor(s):</i>	<b>Bev and Darlene Wilken</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000
<b>Ted Newton Memorial Scholarship [I0198]</b>	
Established in honour of Professor Ted Newton, the founding chair of the Department of Mathematics and Statistics. Awarded in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Family, friends and colleagues of Dr. T.D. (Ted) Newton</b>
<i>Qualification(s):</i>	Student majoring in mathematics or statistics in year 2 (i.e. one who has completed a minimum of 5.0 credits up to a maximum of 9.75 credits) who has the highest average over 80% on a minimum of 4.0 credits in year 1 (i.e., while the first 4.0 to 4.75 credits are in progress. A student may be considered for this award once only.
<i>Amount:</i>	1 award of \$1,500
<b>The Jack and Lillian MacDonald Scholarship [E0379]</b>	
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 persons. Apply by letter to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Jack and Lillian MacDonald</b>
<i>Qualification(s):</i>	In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.
<i>Amount:</i>	1 award of \$900
<b>Thomas H. Peters Scholarship [I0233]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Friends and associates of Thomas H. Peters</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$250

<b>Tony Anthony Prize in Comparative Vertebrate Anatomy [I0282]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Tony Anthony Memorial Fund</b>
<i>Qualification(s):</i>	Student who achieves the highest grade in course ZOO*2090, Vertebrate Structure and Function.
<i>Amount:</i>	1 award of \$125
<b>Toronto District Beekeeper's Association Scholarship [I0285]</b>	
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application not required.	
<i>Donor(s):</i>	<b>Mr. Jack Robinson</b>
<i>Qualification(s):</i>	The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
<i>Amount:</i>	1 award of \$500
<b>Tucker Scholarship for Women in Mathematics and Statistics [I0483]</b>	
Established by Emma Tucker, B.Sc. Statistics, 1996, to encourage women in the study of Mathematics and Statistics. Apply by letter outlining activities and interest in the award to the Department of Mathematics and Statistics main office by April 1.	
<i>Donor(s):</i>	<b>Emma Tucker, B.Sc.'96</b>
<i>Qualification(s):</i>	Female full-time mathematics or statistics major with a minimum cumulative average of 80% and completion of a minimum of 10.00 credits. Preference will be given to a student who has contributed to student life within the department.
<i>Amount:</i>	1 award of \$500
<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000
<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400
<b>W. Harold Minshall Scholarship [I0451]</b>	
Provided by Dr. W.H. Minshall (O.A.C.'33). Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall</b>
<i>Qualification(s):</i>	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 and aptitude in crop protection, particularly in weed biology and management. 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 on the basis of academic standing in the relevant courses and participation in extra curricular activities.
<i>Amount:</i>	1 award of \$1,000
<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal

<b>W.N. Vaughan Medal [C0299]</b>
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.
<i>Donor(s):</i> <b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Medal
<b>Wally Fraser Mathematics Scholarship [I0544]</b>
This scholarship is named in honour of Professor Wally Fraser, a founding member of the Department of Mathematics and Statistics. A student may only be considered for this award once. Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>The Department of Mathematics and Statistics and (retired) Professor Dixon More, C.P.E.S.</b>
<i>Qualification(s):</i> Third year student majoring in mathematics (i.e., one who has completed a minimum of 10.00 credits up to a maximum of 14.75 credits) who has a cumulative average of at least 80%, and the highest average over 80% in a minimum of 4.00 credits in year 2 (i.e., while earning 5.0 to 9.75 credits).
<i>Amount:</i> 1 award of \$750
<b>Waterloo-Wellington CA Association Award [I0367]</b>
Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.
<i>Donor(s):</i> <b>Waterloo-Wellington Chartered Accountants Association</b>
<i>Qualification(s):</i> Student who achieves the highest academic standing in the course AGE*3330, Intermediate Accounting.
<i>Amount:</i> 1 award of \$100
<b>William Furlong Scholarship in Microeconomics [I0582]</b>
The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON*1050) in the fall semester. Application not required.
<i>Donor(s):</i> <b>Colleagues &amp; Friends of Dr. William Furlong</b>
<i>Qualification(s):</i> Full-time students enrolled in Introductory Microeconomics (ECON*1050)
<i>Amount:</i> 3 awards of \$200
<b>Wilma Hollywood Memorial Scholarship [I0509]</b>
Established by the Department of Psychology, in honour of the late Wilma Hollywood, a long-serving staff member. Application not required.
<i>Donor(s):</i> <b>Department of Psychology</b>
<i>Qualification(s):</i> Student majoring in Psychology in either the B.A. or B.Sc. program who has achieved the highest cumulative average in the core courses.
<i>Amount:</i> 1 award of \$200
<b>Year 3 Mathematics Scholarship [I0506]</b>
Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>The Department of Mathematics and Statistics</b>
<i>Qualification(s):</i> Fourth year student majoring in mathematics (i.e., one who has completed a minimum of 15.00 credits up to a maximum of 19.75 credits) who has a cumulative average of at least 80%, and the highest average over 80% in a minimum of 4.00 credits in year 3 (i.e., while earning 10.0 to 14.75 credits). A student may be considered for this award once only.
<i>Amount:</i> 1 award of \$750
<b>Year 3 Statistics Scholarship [I0507]</b>
Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>The Department of Mathematics and Statistics</b>
<i>Qualification(s):</i> Fourth year student majoring in statistics (i.e., one who has completed a minimum of 15.00 credits up to a maximum of 19.75 credits) who has a cumulative average of at least 80%, and the highest average over 80% in a minimum of 4.00 credits in year 3 (i.e., while earning 10.0 to 14.75 credits). A student may be considered for this award once only.
<i>Amount:</i> 1 award of \$750

## In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).
<i>Donor(s):</i> <b>3M Canada Company</b>
<i>Qualification(s):</i> Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i> 2 awards of \$1,000
<b>Alf and Mary Hales Undergraduate Scholarship in Food Science [I4510]</b>
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.
<b>ACCESS AWARD</b>
<i>Donor(s):</i> <b>Alf and Mary Hales</b>
<i>Qualification(s):</i> Student registered in semesters 5 to 8 of the B.Sc. program in Food Science with a demonstrated interest in Meat Science and demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 1 award of \$1,000
<b>C.B.S. ACCESS Scholarships [I4526]</b>
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. Awarded in the Winter semester. Not tenable with the Hagen Undergraduate Access Scholarship. ACCESS AWARD
<i>Donor(s):</i> <b>Alumni and friends of C.B.S.</b>
<i>Qualification(s):</i> Full-time students beyond semester 4 with demonstrated financial need. Awarded to the students with the highest cumulative averages registered 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).
<i>Amount:</i> 2 awards of \$500
<b>C.P.E.S. Dean's Scholarship - ACCESS [I4527]</b>
Established by a number of industrial, commercial and public sector corporations, 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. Awarded in the Winter semester. This award may be held once only. ACCESS AWARD
<i>Donor(s):</i> <b>Established by a number of industrial, commercial and public sector corporations</b>
<i>Qualification(s):</i> Students with demonstrated financial need registered in any major program in C.P.E.S. in, or beyond, second year. A minimum 80% cumulative average is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 1 award of \$750
<b>City of Guelph 175th Anniversary Awards [I0515]</b>
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.
<i>Donor(s):</i> <b>The Guelph Community Foundation</b>
<i>Qualification(s):</i> Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i> 1 award of \$1,000

<b>Earl B. MacNaughton C.P.E.S. ACCESS Scholarships [I4172]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students currently registered in the final year of an honours program in the College of Physical and Engineering Science 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).
<i>Amount:</i>	2 awards of \$1,000
<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000
<b>Erin Demers Memorial Scholarship [I0406]</b>	
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 April 1 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.	
<i>Donor(s):</i>	<b>Family and friends of Erin Katrina Demers</b>
<i>Qualification(s):</i>	A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.
<i>Amount:</i>	1 award of \$2,000
<b>Euclid-Hitachi Scholarships [I4517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Euclid-Hitachi of Canada Ltd.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500
<b>Gordon Ashton Scholarship [I4535]</b>	
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), 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>C. Dixon More</b>
<i>Qualification(s):</i>	All statistics majors who have completed a minimum of 10.00 credits with a cumulative average of at least 70% and who have demonstrated financial need. Selection is by the College of Physical and Engineering Science Awards Committee, on the recommendation of Student Financial Services, from eligible students assessed as having the greatest financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$500

<b>Graham Family Incentive Scholarship [I4506]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Harvey Graham O.A.C. '39</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$5,000
<b>Graham, Fraser and Trevor Bosch Scholarships in Chemistry [I4288]</b>	
Established by Mr. Martin Bosch of the Guelph Soap Company, with the assistance of the Ontario government's OSOTF program. Students with high academic standing registered in Year 3 (minimum of 10.00 - 14.75 credits) or Year 4 (at least 15.00 credits) of studies will be notified by the Awards Committee and Chair of the Department of Chemistry and advised to complete a Financial Need Assessment Form (N.A.F.) in Student Financial Services by February 1st. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mr. Martin Bosch of the Guelph Soap Company</b>
<i>Qualification(s):</i>	Outstanding undergraduate students in the B.Sc. Chemistry major, or in the B.Sc.(Tech.) Applied Pharmaceutical Chemistry program, who have demonstrated financial need. Of the recipients with demonstrated financial need and 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 3000 level chemistry courses taken in Year 3. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,500
<b>Guelph Varsity Athletic Accessibility Scholarship [I0518]</b>	
Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<i>Donor(s):</i>	<b>Alumni and friends of the University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.
<i>Amount:</i>	2 awards of \$1,250
<b>Hagen Undergraduate Scholarship [I4525]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Rolf C. Hagen</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$800

**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.P.E.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 if applicable, attach a letter stating research interest and involvement. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Mrs. Margaret L. Middleton

**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 \$500

**Kathleen and R. Douglas Kennedy Scholarship in CSAHS [I0546]**

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.).

**Donor(s):** Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy

**Qualification(s):** This scholarship will be awarded to a student in CSAHS with high academic achievement. Preference will be given to students registered in the Department of Family Relations and Applied Nutrition, the School of Hospitality and Tourism Management, or the Department of Marketing and Consumer Studies and to students with demonstrated financial need.

**Amount:** 1 award of \$1,000

**Keith Ronald Undergraduate Scholarship [I4532]**

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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Friends and Colleagues of Professor Keith Ronald

**Qualification(s):** B.Sc. student, registered in C.B.S., who has completed at least 12.5 credits, who is entering the Marine Biology and Oceanography Course, ZOO\*4300, held at the Huntsman Marine Science Centre, St. Andrew's, New Brunswick, and has maintained a cumulative average of at least 80%. 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

**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. Students may hold this award more than once. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Earl B. MacNaughton and faculty, staff and alumni of the Department of Physics

**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 70% in the required physics courses of that program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 4 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '52

**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:** 2 awards of \$2,500

**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.).

**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 \$1,000

**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.) ACCESS AWARD

**Donor(s):** Scottish Studies Foundation and private donors

**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 Toxicology [I4528]**

Established by Wellington Laboratories, 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. One letter of support should be provided from a faculty member who is not a member of the Selection Committee. Apply, including a reference letter and a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Mr. Brock Chittim

**Qualification(s):** Students with demonstrated financial need in an undergraduate toxicology program at, or beyond, semester 5. Applicants should have achieved a minimum 77% cumulative average in the science courses of the previous two academic semesters. Previous recipients of the award may reapply in subsequent years, but preference will be given to those applicants who have not previously held this award. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 2 awards of \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

**Donor(s):** The Giuliani Family

**Qualification(s):** Most academically promising applicant with a demonstrated disability and having financial need.

**Amount:** 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

**Qualification(s):** Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

**Amount:** 1 award of \$1,000

<b>Walter and Marion MacDougald Scholarship [I4530]</b>	
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. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) ACCESS AWARD	
<i>Donor(s):</i>	<b>Doug MacDougald, D.V.M.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,000

<b>Wellington Laboratories Scholarship [I4308]</b>	
Wellington Laboratories, with the assistance of the Ontario government's OSOTF program, established this award through an endowment provided by Mr. Brock Chittim of Wellington Laboratories. Highly qualified students will be notified by the Chair of the Department of Chemistry and the Department Awards Committee to complete a Financial Need Assessment Form (N.A.F.) and submit to Student Financial Services by February 1. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mr. Brock Chittim of Wellington Laboratories</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 15.0 course credits of an honours major program offered by the Department of Chemistry. Student with demonstrated financial need and the highest cumulative averages in at least three 3000 level chemistry courses taken in semesters 5 or 6. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,000

<b>William &amp; Nona Heaslip Scholarship [I0589]</b>	
Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The William and Nona Heaslip Foundation</b>
<i>Qualification(s):</i>	Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.
<i>Amount:</i>	2 awards of \$15,000

<b>Yeandle Family In-Course Scholarships [I3546]</b>	
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. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Awards will be made on the basis of financial need and academic achievement. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Estate of Audrey Yeandle</b>
<i>Qualification(s):</i>	Full-time undergraduate students registered in each of the eight academic units and CIDS within the College of Social and Applied Human Sciences . Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Awards will be made on the basis of financial need and academic achievement.
<i>Amount:</i>	Several awards up to \$2,000

### In-course Awards with Financial Need

<b>Archie and Isabelle (Cook) Rintoul CSAHS Bursary [I3018]</b>	
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. Two awards of \$500 (one in each of the two colleges).	
<i>Donor(s):</i>	<b>Archie and Isabelle (Cook) Rintoul</b>
<i>Qualification(s):</i>	Students enrolled in the BASc program or the School of Hospitality and Tourism Management, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program and the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs. Students who have completed semester 4 (10.00 credits) and who have demonstrated financial need are eligible.
<i>Amount:</i>	2 awards of \$500

<b>Archie and Isabelle (Cook) Rintoul O.A.C. Bursary [I3060]</b>	
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. Two awards of \$500 (one in each of the two colleges).	
<i>Donor(s):</i>	<b>Archie and Isabelle (Cook) Rintoul</b>
<i>Qualification(s):</i>	Students enrolled in the BASc program or the Hotel and Food Administration, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program and the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs. Students who have completed semester 4 (10.00 credits) and who have demonstrated financial need are eligible.
<i>Amount:</i>	2 awards of \$500

<b>Bette Stephenson Accessibility Bursary [I3054]</b>	
In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.
<i>Amount:</i>	3 awards to a maximum of \$1,500

<b>Brinson Partners Inc. Bursaries [I3526]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Brinson Partners Inc.</b>
<i>Qualification(s):</i>	Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,500

<b>Burnbrae Farms Bursaries [I3525]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Burnbrae Farms</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Catherine and Brian Berg Memorial Bursary [I3542]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Families of Cathy and Brian Berg</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$500

<b>Class of '72: 25th Reunion Bursaries [I3512]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Class of '72: 25th Reunion</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Class of 1933 (in honour of the late Prof. W.J. Squirrel)

**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:** 3 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Class of 1936

**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:** 2 awards of \$500

**Credit Valley Conservation Authority Foundation Bursary [I3007]**

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

**Donor(s):** Credit Valley Conservation Authority Foundation

**Qualification(s):** Full-time student registered in B.A. Geography, B.Sc. Geographic Information Systems and Environmental Analysis, B.Sc. Engineering (Water Resource Engineering), B.Sc.(Agr.) Agroecosystem Management or B.Sc.(Env.) Geography majors with demonstrated financial need. Preference will be given to a student who resides in a member municipality of the Credit Valley Authority Foundation.

**Amount:** 1 award of \$500

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Mrs Deborah Leach-Sartor

**Qualification(s):** O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and 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:** 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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

**Donor(s):** Mrs. Elizabeth Burton

**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 up to \$2000

**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. ACCESS AWARD

**Donor(s):** Knechtel Scholarship Fund and the Toronto section of Canadian Institute of Food Science Technology

**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:** 2 awards of \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Established by the Miles Family

**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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD. Varying number of awards totalling \$1,000.

**Donor(s):** Gordon B. Henry, O.A.C. '34

**Qualification(s):** Undergraduate and graduate 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 \$1,000

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Gryphon Investment Council Inc.

**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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

**Amount:** Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s):** Undergraduate Students

**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 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. Awarded in the Winter semester.

*Donor(s):* **Mr. T.K.C. Karr, O.A.C. '32**  
*Qualification(s):* O.A.C. students with demonstrated financial need  
*Amount:* Several varies

**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.

*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. Awarded in the Winter semester. 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

**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):* Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.  
*Amount:* Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

*Donor(s):* **Mrs. Norma L. Valeriotte**  
*Qualification(s):* Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.  
*Amount:* Several 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. Awarded in the Winter semester.

*Donor(s):* **Family and friends of Irvine and Grace B.L.A.ck**  
*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

**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. Awarded in the Winter semester. One or more awards totalling \$5,000.

*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:* Various awards totalling \$5,000

**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. ACCESS AWARD

*Donor(s):* **The Rathlyn Foundation**  
*Qualification(s):* Undergraduate students in the D.V.M. program, students registered in the Faculty of Graduate Studies and enrolled in a department of the Ontario Veterinary College, and undergraduate 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 of \$5,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Mr. J.H. Leroux**  
*Qualification(s):* O.A.C. degree students in the B.Sc.(Agr.), B.Sc., B.Comm. or B.Sc.Env.) programs with demonstrated financial need. Satisfactory academic standing is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).  
*Amount:* 4 awards of \$1,000

**Margaret Rich Bursary [I3055]**

Established by the Jean Rich Foundation to assist students with an academic interest in animal nutrition. Apply by October 7 with a completed Financial Need Assessment Form (N.A.F.) Form and a letter indicating interest in animal nutrition and in being considered for this prestigious award, including evidence of at least 2.00 credits completed in nutrition courses.

*Donor(s):* **Jean Rich Foundation**  
*Qualification(s):* Undergraduate Honours B.Sc. students in any college, who have completed more than 10.00 credits may apply. The University Bursary Committee will use Financial Financial Need Assessment Form (N.A.F.) and satisfactory academic standing for continuation in the program of study to determine the recipient.  
*Amount:* 1 award of \$5,000

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Estate of Mary I. Whitelock**  
*Qualification(s):* All undergraduate, graduate or O.A.C. diploma 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

**Masterfeeds Bursaries [I3514]**

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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Masterfeeds**

*Qualification(s):* 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).

*Amount:* 4 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. '38 Alumni**

*Qualification(s):* O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 7 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD.

*Donor(s):* **O.A.C. Class of '55**

*Qualification(s):* Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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 \$500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. '57 and the O.A.C. Alumni Foundation**

*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:* 5 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. Alumni Foundation**

*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:* 4 awards of \$500

**Ontario Cattlemen's Association Degree Bursary [I3506]**

Provided by the Ontario Cattlemen's Association and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Ontario Cattlemen's Association**

*Qualification(s):* Students with demonstrated financial need who are enrolled in semester 5 or above in the B.Sc.(Agr.), B.Comm.(Agricultural Business), B.Sc.(Animal Biology) or B.Sc.(Food Science) program and have a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 4 awards of \$500

**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. Awarded in the Winter semester.

*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 and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Ontario Federation of Agriculture**

*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. A student may receive up to three bursaries annually (\$1,500). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 12 awards of \$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. Awarded in the Winter semester.

*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]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

*Donor(s):* **Office of Registrarial Services**

*Qualification(s):* Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

*Amount:* Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

*Donor(s):* **Family and Friends of Ron Scriver**

*Qualification(s):* Students registered in any program offered by C.P.E.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 \$1,500

<b>Scotiabank Bursaries [I3532]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Scotiabank</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>T.K. Warley Bursaries [I3510]</b>	
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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. Alumni Association</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$500

<b>University of Guelph Access Bursaries [I3522]</b>	
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000	
<i>Donor(s):</i>	<b>Alumni and Friend of the University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of \$500, Several awards of \$2,000

<b>University of Guelph Alumni Association Access Bursaries [I3523]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>University of Guelph Alumni Association</b>
<i>Qualification(s):</i>	Full-time in-course students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,000

<b>University of Guelph Child Care Bursaries [I3053]</b>	
In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.
<i>Amount:</i>	Several awards of up to \$2,000

<b>University of Guelph International Bursary [I3048]</b>	
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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several varies

<b>University of Guelph Undergraduate In-Course Bursaries (MET-TR-UG) [I3037]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards ranging in value from \$100 to \$3,000

<b>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [I3047]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards to a maximum of \$800

<b>University Police Bursaries [I3019]</b>	
The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The University Police</b>
<i>Qualification(s):</i>	Full-time undergraduate and graduate students who have financial need.
<i>Amount:</i>	Several of various amounts

<b>University Student Assistance Program [I3057]</b>	
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. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of various amounts to a maximum of \$1,000

### In-course Travel Grants

<b>A.W. Archibald Memorial Travel Grant [T4541]</b>	
Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.	
<i>Donor(s):</i>	<b>A.W. Archibald, O.A.C. '33</b>
<i>Qualification(s):</i>	Undergraduate students in any O.A.C. program with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	Several up to \$1000

**Aeroplan International Travel Grant [T0604]**

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

**Donor(s):** Aeroplan

**Qualification(s):** Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

**Amount:** 1 plane ticket per each semester

**Arthur D. Latonnell Undergraduate Travel Grants [T0058]**

An endowment fund established in memory of Arthur D. Latonnell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latonnell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

**D & G Hart Travel Grant [T0601]**

Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.

**Donor(s):** Family of Douglas and George Hart

**Qualification(s):** Students currently enrolled in any O.A.C program with a minimum 70% cumulative average who intend to participate in travel related to course study.

**Amount:** 1 award of up to awards of \$1,000

**Geography Field Trip Travel Grant [T0584]**

In honour of the retirement of Dr. G.T. Bloomfield, former faculty member and Chair of the department of Geography from 1977 to 1982. Upon registration for GEOG \*4690, students will submit to the chair of the department a one essay outlining the benefits and expectations of the field course to their career as a geographer and one letter of reference from a geography professor.

**Donor(s):** Alumni, Colleagues, and Friends of Dr. G.T. Bloomfield

**Qualification(s):** Full-time students enrolled in the major honours program (B.A.H; B.Sc.(ESS); B.Sc.(Env)) in the Department of Geography who have completed 12.5 course credits and have an overall average of at least 70% at the time of registration for GEOG \*4690

**Amount:** 1 award of \$450

**H.C. Mason Travel Scholarships [T0598]**

In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Mr. F.W. Bray

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study

**Amount:** various awards up to \$1,500

**Human Health & Nutritional Sciences Travel Grant [T0599]**

Established by private donation to encourage senior students in the academic programs of Human Health and Nutritional Sciences (H.H. N.S.) to study abroad. Apply by the end of the third week of the semester preceding the planned semester of departure to the Chair of H.H.N.S. and include a clearly described schedule of study/research plan for the time abroad and budget. The outline should justify how the time abroad will complement the academic program and enhance educational goals. Within the budget, the applicant should identify how the grant will be used. Students should also include verification of acceptance as a visiting or exchange student or Letter of Permission student status.

**Donor(s):** Department of Human Health and Nutritional Sciences

**Qualification(s):** Students enrolled in Human Kinetics, Nutrition and Nutraceutical Sciences or Bio-medical Science majors of the B.Sc. program who have completed 15 credits and are traveling to one of: the University of Copenhagen, Denmark; University of Maastricht, Netherlands; Deakin University, Royal Melbourne Institute of Technology (R.M.I.T.), or the University of Melbourne, Melbourne Australia.

**Amount:** up to awards of \$2,000

**J. Ross Cavers Study Abroad Scholarship [T0051]**

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

**Donor(s):** Class of O.A.C. '53

**Qualification(s):** Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

**Amount:** 3 awards of \$1,800

**J.D. Cunningham Travel Grant [T0605]**

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

**Donor(s):** Ontario Food Protection Association

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

**Amount:** 1 award of \$2,000

<b>Lorne Page Memorial Travel Grants [T0475]</b>
Established by Shirley Page in memory of her husband Lorne, a staff member in Animal and Poultry Science for over 34 years. Apply by letter to the Chair, Department of Animal and Poultry Science by February 1, outlining the nature of the conference and your contribution to the program in the department. One or two awards totalling \$1,000.
<i>Donor(s):</i> <b>Shirley Page</b>
<i>Qualification(s):</i> Students in Animal Biology or in Agricultural Science with an interest in animal production who have completed 12.50 credits with satisfactory academic standing and who are planning to attend a student conference or activity related to animal production.
<i>Amount:</i> 1 award of \$1,000
<b>Mary Beverley-Burton Travel Scholarships [T4512]</b>
Established by the Department of Integrative Biology, with the assistance of the Ontario government's OSOTF program in honour of Professor Mary Beverley-Burton, of the former Department of Zoology (1968-95), whose research on monogenean worms took her all over the globe. This award is to assist students in attending field courses offered by the Department. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by February 1. ACCESS AWARD
<i>Donor(s):</i> <b>Faculty, staff and alumni of the Integrative Biology Department</b>
<i>Qualification(s):</i> Students in the B.Sc. program who are in good academic standing with at least a 70% cumulative average and with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 3 awards of \$500
<b>Massey Fund Travel Scholarships [T0417]</b>
Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.
<i>Donor(s):</i> <b>O.A.C. Awards Committee</b>
<i>Qualification(s):</i> O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.
<i>Amount:</i> 1 award of \$750
<b>O.A.C. '05 Excellence Travel Grant [T0060]</b>
In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.
<i>Donor(s):</i> <b>Class of OAC 1905 and the Class of OAC 2005</b>
<i>Qualification(s):</i> Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.
<i>Amount:</i> 1 award of \$300
<b>O.A.C. '47 Travel Bursaries [T3505]</b>
Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD
<i>Donor(s):</i> <b>O.A.C. '47</b>
<i>Qualification(s):</i> O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> 3 awards of \$600

<b>O.A.C. '54 International Study Scholarship [T0586]</b>
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 April 1, no more than two semesters prior to the commencement of the program.
<i>Donor(s):</i> <b>Class of O.A.C. '54</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 2 awards of \$1,450
<b>Physics Travel Scholarship [T0400]</b>
This award is given annually to assist students with travel and/or housing costs associated with attending a semester or more of academic study or co-operative work experience at a recognized university outside Canada. Depending on availability of funds, more than one recipient may be selected for this award. Applications must be accompanied by a one-page description of the planned travel, including budget, to the Chair of the Department of Physics at least two months prior to departure.
<i>Donor(s):</i> <b>Department of Physics</b>
<i>Qualification(s):</i> Student who has completed at least semester 4 of one of the majors in the Physics program with a cumulative average of 80% or greater, and who has obtained a Letter of Permission to attend the University abroad.
<i>Amount:</i> 1 award of \$500
<b>Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]</b>
The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.
<i>Donor(s):</i> <b>The Estate of Richard Hungerford</b>
<i>Qualification(s):</i> Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i> Several awards of varying amounts to a maximum of \$1,000
<b>Robb Travel Grants [T3028]</b>
These travel grants have been provided in recognition of her love of agriculture, by the estate of Martha Robb, Paris, Ontario. Apply to the Dean, O.A.C. by April 15. Varying amounts (80% of the travel costs will be covered up to \$750 per student).
<i>Donor(s):</i> <b>The estate of Martha Robb</b>
<i>Qualification(s):</i> O.A.C. students who are attending another university on a Letter of Permission.
<i>Amount:</i> Several varies
<b>Roderick Long International Travel Grant [T0360]</b>
Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associated with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.
<i>Donor(s):</i> <b>Mr. Roderick W. Long</b>
<i>Qualification(s):</i> O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters
<i>Amount:</i> Several awards of \$1,500

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$1,000

## 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

<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000

<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>Harold A. Kopas Memorial Entrance Award [E0152]</b>	
The award is restricted to students who have completed their secondary school education within the County of Wellington or Waterloo Region. 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). Deadline to submit the application is May 1. One award of \$6,200 (\$2,000 in year 1 and \$1,400 annually for 3 years).	
<i>Donor(s):</i>	<b>The Harold A. Kopas Charitable Foundation</b>
<i>Qualification(s):</i>	Student who has demonstrated financial need, together with a minimum average of 70% entering the B.Sc.(Agr.) program. 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.
<i>Amount:</i>	1 award of \$6,200
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>James MacMillan Memorial Scholarship [I0494]</b>	
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7.	
<i>Donor(s):</i>	<b>Austin Conway</b>
<i>Qualification(s):</i>	Kemptville College graduate with high academic standing (a minimum 75% cumulative average) who registers in the O.A.C. degree program in Agriculture or in Agriculture and Business. Financial need may also be considered.
<i>Amount:</i>	1 award of \$2,500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

**Amount:** 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

**Donor(s):** Mrs. Helen Quinn (O.A.C. '35)

**Qualification(s):** Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

**Amount:** 1 award of \$1,500

**Robert Thompson Scholarship [E0283]**

Established in memory of the late Robert Thompson. Application not required.

**Donor(s):** The estate of Mrs. Sarah Jane Fiske

**Qualification(s):** Students of high academic standing entering the first semester of the B.Sc.(Agr.) program.

**Amount:** 1 award of \$800

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

**Donor(s):** Ross and Mary Lou Klopp

**Qualification(s):** Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

**Amount:** 1 award of \$500

**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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc.

**Qualification(s):** Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. 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

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic merit.

**Amount:** 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

**Donor(s):** Rol-Land Farms

**Qualification(s):** Outstanding entering undergraduate degree students 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

**Amount:** 150 awards of \$9,000

## Entrance Awards with Financial Need

<b>Fred Hindle Bursary [E3500]</b>	
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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).	
<i>Donor(s):</i>	<b>W. Roy Hindle and family</b>
<i>Qualification(s):</i>	An entering O.A.C. degree student who has demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statement on Awards).
<i>Amount:</i>	1 award of \$6,000
<b>Gord Bennett Memorial and O.A.C. '43 Class Bursary [E3515]</b>	
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 a this bursary. Apply by letter 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). Deadline to submit the online application and letter is May 1.ACCESS AWARD	
<i>Donor(s):</i>	<b>The family and friends of R. Gordon Bennett, O.A.C. '43</b>
<i>Qualification(s):</i>	O.A.C. student with demonstrated financial need entering the Diploma,B.Sc.Agr.), or B.Comm., Agricultural Business major, programs. 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).
<i>Amount:</i>	1 award of \$1,000
<b>Harvey Graham Bursary [E3030]</b>	
Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.	
<i>Donor(s):</i>	<b>Harvey Graham, O.A.C. '39</b>
<i>Qualification(s):</i>	Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School , or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.
<i>Amount:</i>	1 award of \$1,700
<b>International Student Entrance Bursaries [E3043]</b>	
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. Students who have applied to the University of Guelph will receive an application form.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students on a student visa entering an undergraduate degree program at the University of Guelph with demonstrated financial need.
<i>Amount:</i>	Several awards of \$1,000, Several awards of \$3,000
<b>Robert Arthur Stewart Bursaries [E3272]</b>	
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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).	
<i>Donor(s):</i>	<b>The Estate of Mrs. H. Stewart</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	12 awards of \$500

## In-course Scholarships

<b>Allied Associates LLP, Chartered Accountants Prize [C0004]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Allied Associates LLP, Chartered Accountants</b>
<i>Qualification(s):</i>	Student graduating from the B.Sc.(Agr.) program with the highest cumulative average in all semesters.
<i>Amount:</i>	1 award of \$250
<b>Amber (Gibbons) Underwood Communications Award [I0207]</b>	
Offered in memory of Amber (Gibbons) Underwood (O.A.C.'79, M.SC.'87) by the Gibbons and Underwood families and the class of O.A.C.'79. Application not required.	
<i>Donor(s):</i>	<b>The Gibbons and Underwood families and the Class of O.A.C. '79</b>
<i>Qualification(s):</i>	Students enrolled in the B.Sc.(Agr.) program of the Ontario Agricultural College. The recipient will be selected on the basis of their academic performance in one or more of the courses dealing with communications: REXT*3040 Communication Process, REXT*3050, REXT*3060 International Communication and REXT*4060 Agricultural Communication.
<i>Amount:</i>	1 award of \$400
<b>Beth Duncan Gold Medalist [C0205]</b>	
Offered by the O.A.C. Alumni Foundation to a student in the B.Sc.(Agr.) program. Application not required.	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal
<b>Better Beef Scholarship [I0588]</b>	
These scholarships are provided to two students that have selected AGR*4450 Research Project in Agriculture I for their next semester of study. Selection is based on the student's research topic proposal related to meat quality and quality control. Apply by April 1 with a letter, of not more than two pages, outlining proposed research topic to the Chair, Animal and Poultry Science.	
<i>Donor(s):</i>	<b>Better Beef Ltd.</b>
<i>Qualification(s):</i>	BSc.(Agr), BSc.(Food Science), or BSc.(Animal Biology) students that have selected AGR*4450 for their next semester of study.
<i>Amount:</i>	2 awards of \$2,500
<b>Bill Taylor Memorial Scholarship [I0280]</b>	
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>AMF Canada Ltd.</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$900
<b>Blackburn Scholarship [I0404]</b>	
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 by April 1.	
<i>Donor(s):</i>	<b>D.J. Blackburn</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>Bruce County Graduation Prize [C0037]</b>	
Offered by the Corporation of the County of Bruce. Application not required	
<i>Donor(s):</i>	<b>The Corporation of the County of Bruce</b>
<i>Qualification(s):</i>	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
<i>Amount:</i>	1 award of \$800

<b>Bruce M. Cohoe Prize [C0069]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Mr. Bruce M. Cohoe</b>
<i>Qualification(s):</i>	Student in the final semester level with an interest in agronomy with outstanding academic achievement and participation in extracurricular activities at the departmental, College and University levels.
<i>Amount:</i>	1 award of \$1,200
<b>Bruce W. Minshall Memorial Scholarship [I0450]</b>	
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 to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall</b>
<i>Qualification(s):</i>	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 the student with an interest in crop protection and showing the greatest improvement in academic standing since entering the program.
<i>Amount:</i>	1 award of \$1,000
<b>C.M. and D.J. Switzer Scholarships [I0276]</b>	
Apply by April 1 to Student Financial Services.	
<i>Donor(s):</i>	<b>C.M. and D.J. Switzer</b>
<i>Qualification(s):</i>	One to a student who has completed semester 2 of the Diploma in Agriculture program and one to a student who has completed semester 4 of a degree program in O.A.C. Recipients will have a minimum of 70% standing and have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.
<i>Amount:</i>	1 award of \$2,000
<b>C.W. Riley Prize [C0246]</b>	
The C.W. Riley Prize was established by a number of his friends and associates. Application not required.	
<i>Donor(s):</i>	<b>Friends and associates of C.W. Riley</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$375
<b>Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]</b>	
Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards Committee by April 1 with a summary of participation in the Ag Ec & Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member.	
<i>Donor(s):</i>	<b>Canadian Agri-Marketing Association (Ontario)</b>
<i>Qualification(s):</i>	Student who has competed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec & Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing.
<i>Amount:</i>	1 award of \$1,500
<b>Canadian Association of Agri-Retailers Scholarship [I0444]</b>	
Provided by the Canadian Association of Agri-Retailers. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Canadian Association of Agri-Retailers</b>
<i>Qualification(s):</i>	Student who has competed semesters 4, 5, or 6 in B.Sc.(Agr.) or B.Comm., Agricultural Business major, with a minimum 70% average in the previous 2 semesters of full-time equivalent study, participated in extracurricular activities, and has an interest in the input supply industry in agriculture.
<i>Amount:</i>	1 award of \$1,000
<b>Certified General Accountants Award for Excellence Prize [C0025]</b>	
Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.	
<i>Donor(s):</i>	<b>Certified General Accountants Association of Ontario</b>
<i>Qualification(s):</i>	Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGECE*2220; Management Accounting AGECE*2230; and Intermediate Accounting AGECE*3330.
<i>Amount:</i>	1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

<b>CFRU Volunteer Award [I0215]</b>	
Apply to the CFRU Board of Governors by April 30.	
<i>Donor(s):</i>	<b>Station Manager, CFRU</b>
<i>Qualification(s):</i>	Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.
<i>Amount:</i>	2 awards of \$250
<b>Charles McGowan Memorial Prize [C0187]</b>	
Established in memory of the late Lieutenant Charles McGowan. Application not required.	
<i>Donor(s):</i>	<b>Charles McGowan Memorial Fund</b>
<i>Qualification(s):</i>	Outstanding graduating student in an O.A.C. degree program.
<i>Amount:</i>	1 award of \$300
<b>Class of '51 O.A.C. Leadership Awards [C0063]</b>	
Established by Year '51 O.A.C., on the occasion of its 45th anniversary. At the discretion of the O.A.C. Awards Committee students may be selected before graduation. Application not required.	
<i>Donor(s):</i>	<b>Year '51 O.A.C.</b>
<i>Qualification(s):</i>	Students graduating from the degree program in a major in an O.A.C. department who have a 70% standing in the final year of study and who have demonstrated leadership in the College or University extracurricular activities.
<i>Amount:</i>	4 awards of \$1,000
<b>Class of '67 O.A.C. Centennial Scholarship [I0067]</b>	
Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Class of O.A.C. '67</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000
<b>Class of 1933 Scholarship [C0062]</b>	
Established by the graduating class of 1933 in honour of the late Professor W.J. Squirrell. Apply to Student Financial Services, by April 1.	
<i>Donor(s):</i>	<b>Graduating Class of 1933</b>
<i>Qualification(s):</i>	Graduating students of the BSc(Agr.) program who plan to undertake graduate study in agriculture at a recognized university. Academic standing and involvement in extracurricular activities will be used to determine the recipients.
<i>Amount:</i>	1 5000 or 2 awards of \$2,500
<b>Class of 1970 Scholarship [I0424]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,400
<b>Collins Barrow Award [I0040]</b>	
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i>	Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i>	1 award of \$500
<b>Credit Valley Horticultural Society Scholarship [I0467]</b>	
Apply by April 1 to the O.A.C. Dean's Office with a letter of no more than two pages outlining participation in extracurricular activities in the field of ornamental horticulture. Selection will be based on this participation with a preference given to students who are residents of Mississauga.	
<i>Donor(s):</i>	<b>Credit Valley Horticultural Society</b>
<i>Qualification(s):</i>	O.A.C. student studying in horticulture who has completed 5.0 credits with a minimum 70% average.
<i>Amount:</i>	1 award of \$350

<b>David F. Boyes Apiculture Scholarship [I0031]</b>	
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.	
<i>Donor(s):</i>	<b>The Apiculture Club</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$150
<b>Dawn Morris Memorial Award [C0361]</b>	
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. Students are encouraged to submit information on extracurricular activities to Student Financial Services, by April 1.	
<i>Donor(s):</i>	<b>The Family of Dawn Morris</b>
<i>Qualification(s):</i>	Student who is graduating from the Agricultural Business major of the B.Comm. degree or the Food Agriculture and Resource Economics major in the B.Sc.(Agr.) degree with a minimum 'B+' average. Selection will be on the basis of relevant course work in agricultural marketing, extracurricular participation and employment activities.
<i>Amount:</i>	1 award of \$1,500
<b>Deans' Scholarships [I0323]</b>	
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i>	150 awards of \$1,000
<b>Doug Wakely Memorial Scholarship [I0334]</b>	
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 to Student Financial Services, by April 1.	
<i>Donor(s):</i>	<b>The Harriston Group of the Ontario Grain and Feed Dealers</b>
<i>Qualification(s):</i>	Student in the B.Sc.(Agr.) program who has completed course(s) in livestock production or in grain crop production and who has participated in athletics at the University, intramural or community level as a player or in an organizing capacity.
<i>Amount:</i>	1 award of \$800
<b>Douglas M. Robinson Memorial Prize for Excellence in Communications [I0409]</b>	
In memory of Douglas Robinson (O.A.C.'53), and in conjunction with the establishment of an innovative curriculum in agricultural science at the University of Guelph in 1995, the Innovative Farmers' Association of Ontario and the Robinson family provide this annual prize. Apply by letter to the Dean's Office, O.A.C. by April 1 outlining how communication has been used creatively and effectively. One annual award of \$1,000 or two annual awards of \$500.	
<i>Donor(s):</i>	<b>The Innovative Farmers Association of Ontario</b>
<i>Qualification(s):</i>	Students in the B.Sc.(Agr.) program who demonstrate creativity and excellence in communication.
<i>Amount:</i>	1 award of \$1,000
<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>	
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.	
<i>Donor(s):</i>	<b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i>	Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i>	1 award of \$1,000
<b>Foodland Hydro Scholarship [I0290]</b>	
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 Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Foodland Hydro Committee</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$800

<b>Frank and Gertraude Hurnik Scholarship [I0455]</b>	
Provided by Dr. Frank Hurnik, Professor Emeritus, and faculty member in Animal and Poultry Science 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 Chair, Animal and Poultry Science, by February 1 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.	
<i>Donor(s):</i>	<b>Dr. Frank Hurnik</b>
<i>Qualification(s):</i>	O.A.C. undergraduate or graduate students 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.
<i>Amount:</i>	1 award of \$1,000
<b>Gary Putnam Memorial Scholarship [C0241]</b>	
Provided in memory of their son Gary by Mr. and Mrs. Ross Putnam. Apply to the Associate Registrar, Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Mr. and Mrs. Ross G. Putnam</b>
<i>Qualification(s):</i>	Graduating B.Sc.(Agr.) student with high standing in at least 3 courses in pesticides or alternative methods of insect, disease and weed control.
<i>Amount:</i>	1 award of \$750
<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>	
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<i>Donor(s):</i>	<b>Mrs. George A. Gray</b>
<i>Qualification(s):</i>	Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i>	2 awards of \$1,250
<b>Glen (Andy) W. Anderson Scholarship [I0380]</b>	
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. Students are to apply, including a letter of reference from a Crop Science faculty member, to Student Financial Services, by April 1.	
<i>Donor(s):</i>	<b>Anderson Family</b>
<i>Qualification(s):</i>	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. 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.
<i>Amount:</i>	1 award of \$1,000
<b>Governor General's Medal [C0044]</b>	
Established by the Office of the Governor General of Canada. Application not required.	
<i>Donor(s):</i>	<b>The Chancellor</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Silver medal
<b>Guelph &amp; Wellington County Master Gardeners Scholarship [I0572]</b>	
Selection will be based on the student with the highest cumulative average. Application not required.	
<i>Donor(s):</i>	<b>Guelph &amp; Wellington County Master Gardeners</b>
<i>Qualification(s):</i>	Student that has completed a minimum of 10.0 course credits, enrolled in the B.Sc.(Agr) program with a major in Horticultural Sciences.
<i>Amount:</i>	1 award of \$1,000

**Heimbecker Award in Entrepreneurship [I0388]**

The Heimbecker Award in Entrepreneurship has been established by the friends and associates of Herb Heimbecker, on his retirement as a Director of Goderich Elevators, to honour his contributions to the agrifood industry in Canada. Students should apply to Student Financial Services by April 1, including a resume and a letter highlighting their entrepreneurial skills and their aptitude and interest in business.

**Donor(s):** The friends of Herb Heimbecker at Goderich Elevators

**Qualification(s):** O.A.C. student in B.Sc.(Agr.) or B.Comm., Agribusiness major, who have completed semester 6 are eligible. Students must have a minimum of a B standing (73%-76%) in their previous full-time year or equivalent [5.00] credits, have demonstrated entrepreneurial skills and display an aptitude and an interest in business.

**Amount:** 1 award of \$1,300

**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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

**Donor(s):** International Student Organization (ISO)

**Qualification(s):** Full-time International 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 75%, and is registered at the time of application.

**Amount:** 1 award of \$1,000

**Intervet Canada Poultry Health Prize [C0327]**

Awarded at graduation. Evaluated by the faculty in the Department of Animal and Poultry Science. Application not required.

**Donor(s):** Intervet Canada Inc.

**Qualification(s):** Student enrolled in the B.Sc.(Agr.) program registered in courses AGR\*4400 or AGR\*4500 who submits a paper on some aspect of poultry health as it relates to poultry production.

**Amount:** 1 award of \$500

**J. Ross Cavers Memorial Scholarship [I0349]**

The members of O.A.C.'53 have established, in honour of their highly respected Honorary President and now Honorary Year member, Professor Emeritus Cavers, a scholarship to assist Canadian students to become more aware of international agriculture and hence to contribute to solutions of world food problems. Apply to Student Financial Services by April 1.

**Donor(s):** O.A.C. '54

**Qualification(s):** Canadian citizen with high academic standing over the first two semesters of the B.Sc.(Agr.) program who enrolls in the minor in International Agriculture. Participation in extracurricular activities will also be taken into account. Students must register for the International Field Study course (AGR\*2500) in the year the award is received.

**Amount:** 2 awards 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 to Student Financial Services by April 1.

**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 \$600

**Joerg and Franzis Leiss Horticultural Scholarship [I0565]**

Provided by Mr. Joerg Leiss, O.A.C. '63. Selection will be based on the highest cumulative average (of at least 75%) in the horticultural (HORT) courses normally taken in year 1 and 2. Application not required.

**Donor(s):** Mr. Joerg Leiss, O.A.C. '63

**Qualification(s):** Students who have completed at least 10.0 credits and are currently registered in the Bachelor of Bio-Resource Management, or in the Bachelor of Science in Agriculture with a major in Horticultural Science programs.

**Amount:** 1 award of \$2,000

**John A. Archibald Memorial Scholarship [I0014]**

Awarded in memory of John A. Archibald, former Director of the Horticultural Research Institute of Ontario. Apply to Student Financial Services by April 1.

**Donor(s):** The friends and associates of the late John A. Archibald

**Qualification(s):** Outstanding student with an interest in courses in the Department of Land Resource Science who has completed semester 6. The recipient will be chosen on the basis both of high academic standing and participation in extracurricular activities.

**Amount:** 1 award of \$1,200

**John Deere Foundation of Canada Scholarship [I0516]**

Established through the generosity of The John Deere Foundation of Canada to recognize academic excellence. Application not required.

**Donor(s):** The John Deere Foundation of Canada

**Qualification(s):** Student registered in the B.Sc.Agr., 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]**

Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.

**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 \$600

**Joseph Arlen Memorial Award in Horticulture [C0330]**

Application not required.

**Donor(s):** Mrs. Judy Arlen

**Qualification(s):** Student graduating from the B.Sc.(Agr.) program with an interest in Horticultural Science with the highest cumulative average in all semesters

**Amount:** 1 award of \$500

**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 Student Financial Services by April 1.

**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 \$750

**Kenneth W. Hammond Award [I0045]**

The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.

**Donor(s):** Kenneth W. Hammond

**Qualification(s):** Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.

**Amount:** 1 award of \$1,000

**Kevin Lang Memorial Scholarship [I0328]**

In memory of Kevin Lang, '79 O.A.C. Apply to Student Financial Services, by April 1.

*Donor(s):* **In memory of Kevin Lang, O.A.C. '79**

*Qualification(s):* Student with an interest in courses in Animal and Poultry Science who, at the completion of semester 6, has contributed most to extra curricular activities related to animal agriculture.

*Amount:* 1 award of \$500

**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 the end of the 12th week of the Winter semester.

*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 LGBT Studies [I0591]**

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LGBT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LGBT peoples. Preference will be given to an applicant who is involved in the LGBT 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 LGBT 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 (LGBT) studies, as broadly defined by the applicant.

*Amount:* 1 award of \$1,000

**Land Resource Science Academic Scholarship [C0425]**

Provided by the Land Resource Science Endowment fund. Application not required.

*Donor(s):* **Provided by the Land Resource Science Endowment Fund**

*Qualification(s):* Student graduating from any major in the department with the highest cumulative average.

*Amount:* 1 award of \$1,000

**Land Resource Science Achievement Scholarship [C0426]**

Provided by the Land Resource Science Endowment fund. Apply to Student Financial Services by April 1.

*Donor(s):* **Provided by the Land Resource Science Endowment Fund**

*Qualification(s):* Student graduating from any major in the department with a minimum cumulative average of 70%. Preference will be given to students contributing to student life on campus and/or community 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.

*Donor(s):* **Students, staff, faculty and friends of Dr. Leonard Connolly**

*Qualification(s):* Full-time visiting exchange undergraduate or graduate 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). 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.

*Amount:* 1 award of \$1,000

**Maple Leaf Foods Inc. Shur-Gain Scholarship [I0307]**

Provided by Shur-Gain, a member of Maple Leaf Foods Inc. Apply to Student Financial Services by April 1.

*Donor(s):* **Shur-Gain**

*Qualification(s):* Undergraduate in Animal Science or Animal Biology who has high academic standing during the first 4 semesters and is continuing in that program. Positive evidence of leadership and contribution to university and/or community life are also given strong consideration.

*Amount:* 1 award of \$750

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

*Donor(s):* **TBA**

*Qualification(s):* The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

*Amount:* 3 awards of \$250

**O.A.C. '45 Public Speaking Awards [C0200]**

Offered by the Class of '45 O.A.C., on the occasion of their 40th anniversary. Application not required.

*Donor(s):* **Year '45 O.A.C.**

*Qualification(s):* Graduating students in the B.Sc.(Agr.) or B.Comm.(Agricultural Business) programs who have demonstrated proficiency in public speaking and communication.

*Amount:* 2 awards of \$1,000

**O.A.C. '55 Scholarships [I0064]**

Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.

*Donor(s):* **O.A.C. '55**

*Qualification(s):* Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.

*Amount:* 1 award of \$2,000

**O.A.C. Centennial Graduate Fellowships [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 Student Financial Services by April 1.

*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 are eligible for these fellowships. 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:* 2 awards of \$2,200

**O.A.C. Students' Federation Medal [C0217]**

Application 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 Medal

<b>Ontario Agri Business Association Scholarships (formerly Fertilizer Institute) [I0101]</b>
Provided by the Ontario Agri Business Association to worthy students in the B.Sc.(Agr.) program. Apply to the O.A.C. Awards Committee by April 1 with a letter up to two pages in length detailing your involvement.
<i>Donor(s):</i> <b>Ontario Agri Business Association</b>
<i>Qualification(s):</i> These scholarships are presented to students who have completed between 10.0-15.0 credits in the B.Sc.(Agr.) program. Academic achievement based on cumulative average and participation in extra curricular activities will be considered in making these awards.
<i>Amount:</i> 1 award of \$400
<b>Ontario Agricultural FS Cooperatives Scholarship [I0289]</b>
The award may be held once only and is awarded to the student that demonstrates leadership abilities and have been involved in extracurricular activities, community services, or agricultural employment. Apply to the O.A.C. Dean's Office by April 1 with a letter of no more than two pages outlining extracurricular activities, community services, or agricultural employment.
<i>Donor(s):</i> <b>Growmark, Inc.</b>
<i>Qualification(s):</i> Students who have completed 7.5 course credits of the B.Sc.(Agr.) degree or B.Comm. (Agricultural Business) degree with a minimum cumulative average of 70%.
<i>Amount:</i> 2 awards of \$800
<b>Ontario Horticultural Association Scholarship [I0433]</b>
Provided by the Ontario Horticultural Association. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Ontario Horticultural Association</b>
<i>Qualification(s):</i> Student in the B.Sc.(Agr.) program who has excelled in courses in horticultural science and who has completed semester 6.
<i>Amount:</i> 1 award of \$500
<b>Ottawa-Carleton 1983 International Ploughing Match (O.A.C.) Scholarships [I0227]</b>
Apply to Student Financial Services by April 1 with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining extracurricular activities.
<i>Donor(s):</i> <b>Ottawa-Carleton International Ploughing Match Committee 1983</b>
<i>Qualification(s):</i> Students from the Region of Ottawa-Carleton in the year they have completed semester 2 in the B.Sc.(Agr.) program and who have a cumulative average of 70% (minimum) standing in semesters 1 and 2. Participation in extracurricular activities and financial need will be considered.
<i>Amount:</i> 3 awards of \$1,000
<b>Oxford County Pork Producers Scholarship (Degree) [I0531]</b>
The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.
<i>Donor(s):</i> <b>Oxford County Pork Producers</b>
<i>Qualification(s):</i> Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.
<i>Amount:</i> 1 award of \$1,000
<b>Priscilla and Stanford Reid Trust Prize [I0597]</b>
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.
<i>Donor(s):</i> <b>Priscilla and Stanford Reid Trust Fund</b>
<i>Qualification(s):</i> Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
<i>Amount:</i> 1 award of \$500
<b>R.J. Watford Prize [C0304]</b>
Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>R.J. Watford</b>
<i>Qualification(s):</i> Graduating student who has 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.
<i>Amount:</i> 1 award of \$500

<b>R.W. (Bob) Pawley Scholarship [I0231]</b>
Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Mr. Robert W. Pawley, O.A.C. '39</b>
<i>Qualification(s):</i> Student in the B.Sc.(Agr.) program upon completion of the first 4 semesters who has had active participation or involvement in production agriculture.
<i>Amount:</i> 1 award of \$600
<b>Robert Harcourt Scholarships [I0121]</b>
This fund was established by the late Mrs. R. Harcourt in honour of the late Dr. Robert Harcourt. Application not required.
<i>Donor(s):</i> <b>Established by the late Mrs. R. Harcourt in honour of the late Dr. Robert Harcourt</b>
<i>Qualification(s):</i> Students who have completed the 4th or 6th semester levels with an interest in courses in the Department of Land Resource Science.
<i>Amount:</i> 2 awards of \$1,250
<b>Robert Keegan Memorial Scholarship [C0148]</b>
Offered by the family of the late Robert Keegan, formerly Professor of Plant Breeding. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>The family of the late Robert Keegan</b>
<i>Qualification(s):</i> Student in the Agronomy major. The award will be presented to a student with a minimum of 70% standing in his/her final year, a proficiency and interest in grain crops and who has actively participated in student organizations and extracurricular activities.
<i>Amount:</i> 1 award of \$500
<b>Robert McCann Memorial Scholarship [I0184]</b>
Mrs. Edward McCann offers this scholarship in memory of her son. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Mrs. Edward McCann in honour of her son</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,250
<b>Robert S. and Ethelyne L. Fulkerson Scholarship [I0382]</b>
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, have endowed two annual awards. Applications along with a completed Financial Need Assessment Form (N.A.F.) should be submitted to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Professor Robert S. and Ethelyne L. Fulkerson</b>
<i>Qualification(s):</i> Students in agronomy or crop science who have completed semester 6 with at least a 70% cumulative average, have an interest in crop production, and are in financial need may apply.
<i>Amount:</i> 2 awards of \$750
<b>Ross Jones Memorial Scholarship [C0147]</b>
In memory of Ross Jones, '71 O.A.C., his friends, colleagues and classmates. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Year '71 O.A.C.</b>
<i>Qualification(s):</i> Graduating student who demonstrates the greatest potential in the area of Weed Science.
<i>Amount:</i> 1 award of \$600
<b>Samuel Carr Scholarship [C0048]</b>
Offered from the estate of Samuel Leister Carr. Apply by letter to the O.A.C. Awards Committee by April 1.
<i>Donor(s):</i> <b>The estate of the late Samuel Lester Carr</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$3,000

**Society of Management Accountants of Ontario Scholarship [C0268]**

The scholarship will be awarded at summer convocation. Application not required. One award of \$500 and a free course enrolment in the first complete CMA subject enrolled in the Society's program.

**Donor(s):** Society of Management Accountants, Grand River Chapter

**Qualification(s):** Full-time student graduating from B.Comm., B.A. (minor in Business Administration), or B.Sc. (minor in Business Administration), or B.Sc.(Agr.) (major in Agriculture Business or Food Agriculture and Resource Economics), programs. Student with the highest average in the 2 courses Financial Accounting AGEC\*2220 and Intermediate Accounting AGEC\*3330.

**Amount:** 1 award of \$500, and a free course enrolment in the first complete CMA subject enrolled in the Society's program

**Stephanie Wilken Volunteer Award [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

**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 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

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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.

**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. 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, provided that a minimum of 70% standing is obtained.

**Amount:** 1 award of \$1,000

**Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]**

Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.

**Donor(s):** Mr. & Mrs. J. Van Stralen & family and Mr. & Mrs. Hans Van Der Hoeven & family

**Qualification(s):** Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.

**Amount:** 2 awards of \$400

**W. Harold Minshall Scholarship [I0451]**

Provided by Dr. W.H. Minshall (O.A.C.'33). Apply to Student Financial Services by April 1.

**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 and aptitude in crop protection, particularly in weed biology and management. 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 on the basis of academic standing in the relevant courses and participation in extra curricular activities.

**Amount:** 1 award of \$1,000

**W.C. Winegard Medal [C0311]**

The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.

**Donor(s):** The Board of Governors' of the University

**Qualification(s):** Graduating student who excels both academically and in extracurricular activities.

**Amount:** 1 Gold medal

**W.H. Waddell Scholarship [C0300]**

Established by Professor W.H. Waddell. Apply to Student Financial Services by April 1.

**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 \$600

**W.N. Vaughan Medal [C0299]**

Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.

**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 Medal

**Waterloo-Wellington CA Association Award [I0367]**

Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.

**Donor(s):** Waterloo-Wellington Chartered Accountants Association

**Qualification(s):** Student who achieves the highest academic standing in the course AGEC\*3330, Intermediate Accounting.

**Amount:** 1 award of \$100

**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 April 1 to the O.A.C. Awards Office by letter of not more than two pages.

*Donor(s):* **Maryon Brechin**

*Qualification(s):* Any student registered in a major offered by the Department of Land Resource Science who has completed a minimum 15.0 course credits.

*Amount:* 1 award of \$1,000

**William Furlong Scholarship in Microeconomics [I0582]**

The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON\*1050) in the fall semester. Application not required.

*Donor(s):* **Colleagues & Friends of Dr. William Furlong**

*Qualification(s):* Full-time students enrolled in Introductory Microeconomics (ECON\*1050)

*Amount:* 3 awards of \$200

**William Godfrey Memorial Scholarship in Horticultural Science [I0111]**

In memory of William Godfrey, '33 O.A.C. Apply to Student Financial Services by April 1. One award of \$1,600 (two payments of \$800).

*Donor(s):* **Mrs. Lisabel Godfrey**

*Qualification(s):* Student with and interest in Horticultural Science who has completed semester 4 or 6 with a minimum of 70% standing, who has participated in extracurricular activities and who has an interest in tree fruit production. The scholarship is payable in 2 installments with the second installment conditional upon the student obtaining a minimum of 70% standing in semester 5 and 6 or registering in a graduate program in Horticultural Science as applicable.

*Amount:* 1 award of \$1,600

**In-course Scholarships with Financial Need****3M Canada Scholarships [I0564]**

Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).

*Donor(s):* **3M Canada Company**

*Qualification(s):* Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.

*Amount:* 2 awards of \$1,000

**City of Guelph 175th Anniversary Awards [I0515]**

Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.

*Donor(s):* **The Guelph Community Foundation**

*Qualification(s):* Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.

*Amount:* 1 award of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **The Family of Eleanor & Bill Archibald**

*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 \$1,000

**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 April 1 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):* A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

*Amount:* 1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Euclid-Hitachi of Canada Ltd.**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. '52**

*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:* 2 awards of \$2,500

**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.).

*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 \$1,000

**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 by letter, including a summary of local agricultural activities and a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. ACCESS AWARD

*Donor(s):* **The Shaw Scholarship Committee**

*Qualification(s):* Students registered in the B.A.Sc., B.Comm. in Agricultural Business, B.Sc.(Agr.) or D.V.M. programs studying agriculture, horticulture, equine studies, food and nutrition or veterinary sciences with demonstrated financial need, a 70% cumulative average and involvement in local agricultural activities. Preference will be given to first year 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 \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

*Donor(s):* **The Giuliani Family**

*Qualification(s):* Most academically promising applicant with a demonstrated disability and having financial need.

*Amount:* 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

*Donor(s):* **University of Guelph Retirees Association (U.G.R.A.)**

*Qualification(s):* Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

*Amount:* 1 award of \$1,000

**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. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) ACCESS AWARD

*Donor(s):* **Doug MacDougald, D.V.M.**

*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:* 2 awards of \$1,000

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The William and Nona Heaslip Foundation**

*Qualification(s):* Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

*Amount:* 2 awards of \$15,000

**In-course Awards with Financial Need****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 7 to Student Financial Services. Two awards of \$500 (one in each of the two colleges).

*Donor(s):* **Archie and Isabelle (Cook) Rintoul**

*Qualification(s):* Students enrolled in the BASc program or the Hotel and Food Administration, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program and the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs. Students who have completed semester 4 (10.00 credits) and who have demonstrated financial need are eligible.

*Amount:* 2 awards of \$500

**Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

*Donor(s):* **University of Guelph**

*Qualification(s):* Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

*Amount:* 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of '72: 25th Reunion**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1933 (in honour of the late Prof. W.J. Squirrell)**

*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:* 3 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1936**

*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:* 2 awards of \$500

**Credit Valley Conservation Authority Foundation Bursary [I3007]**

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

*Donor(s):* **Credit Valley Conservation Authority Foundation**

*Qualification(s):* Full-time student registered in B.A. Geography, B.Sc. Geographic Information Systems and Environmental Analysis, B.Sc. Engineering (Water Resource Engineering), B.Sc.(Agr.) Agroecosystem Management or B.Sc.(Env.) Geography majors with demonstrated financial need. Preference will be given to a student who resides in a member municipality of the Credit Valley Authority Foundation.

*Amount:* 1 award of \$500

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Mrs Deborah Leach-Sartor**

*Qualification(s):* O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and 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:* 1 award of \$1,000

**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. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD. A number of awards ranging from \$500 to \$2,000.

*Donor(s):* **The estate of Dr. Donald P. Watson**

*Qualification(s):* Undergraduate students majoring in Horticultural Science, Landscape Architecture, Agronomy, Agricultural Science or Environmental Science, who have completed a minimum of 10.00 credits and who have demonstrated financial need. Recipients must have satisfactory academic standing in their last 10.00 credits. The scholarships will be awarded based on 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

**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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

*Donor(s):* **Mrs. Elizabeth Burton**

*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 up to \$2000

**Grant Misener Bursaries [I3025]**

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. Awarded in the Winter semester.

*Donor(s):* **Dr. Andrew Grant Misener**

*Qualification(s):* Students in the B.Sc.(Agr.) program

*Amount:* Several varies

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Gryphon Investment Council Inc.**

*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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

*Donor(s):* **Student Health and Dental Plan Reserve**

*Qualification(s):* All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

*Amount:* Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s): Undergraduate Students**

**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 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. Awarded in the Winter semester.

**Donor(s): Mr. T.K.C. Karr, O.A.C. '32**

**Qualification(s):** O.A.C. students with demonstrated financial need

**Amount:** Several varies

**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.

**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. Awarded in the Winter semester. 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

**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):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

**Donor(s): Mrs. Norma L. Valeriotte**

**Qualification(s):** Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.

**Amount:** Several 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. Awarded in the Winter semester.

**Donor(s): Family and friends of Irvine and Grace B.L.A.ck**

**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

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s): Mr. J.H. Leroux**

**Qualification(s):** O.A.C. degree students in the B.Sc.(Agr.), B.Sc., B.Comm. or B.Sc.Env.) programs with demonstrated financial need. Satisfactory academic standing is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 4 awards of \$1,000

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s): Estate of Mary I. Whitelock**

**Qualification(s):** All undergraduate, graduate or O.A.C. diploma 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

**Masterfeeds Bursaries [I3514]**

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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s): Masterfeeds**

**Qualification(s):** 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).

**Amount:** 4 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s): O.A.C. '38 Alumni**

**Qualification(s):** O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 7 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD.

*Donor(s):* O.A.C. Class of '55

*Qualification(s):* Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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 \$500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* O.A.C. '57 and the O.A.C. Alumni Foundation

*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:* 5 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* O.A.C. Alumni Foundation

*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:* 4 awards of \$500

**Ontario Agri Business Association Degree Bursaries [I3502]**

The Ontario Agri Business Association, with the aid of the Ontario government's OSOTF program, has made available four bursaries of \$750. Apply by October 7 to Student Financial Services with a letter, of up to two pages in length, detailing your involvement and including a University of Guelph Financial Needs Assessment Form. ACCESS AWARD

*Donor(s):* Ontario Agri Business Association

*Qualification(s):* Awarded to students who have completed a minimum of 10.0 credits in the B.Sc.(Agr.) program in either an unspecialized major or in Food Agriculture and Resource Economics, Animal Science, Agronomy or in the B.Comm. program in Agricultural Business. Students must have a minimum cumulative average of 60%. Students will be selected based on demonstrated financial need and on involvement in community/extracurricular activities. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 4 awards of \$750

**Ontario Cattlemen's Association Degree Bursary [I3506]**

Provided by the Ontario Cattlemen's Association and the O.A.C. Alumni Foundation with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* Ontario Cattlemen's Association

*Qualification(s):* Students with demonstrated financial need who are enrolled in semester 5 or above in the B.Sc.(Agr.), B.Comm.(Agricultural Business), B.Sc.(Animal Biology) or B.Sc.(Food Science) program and have a 60% minimum cumulative average. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 4 awards of \$500

**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. Awarded in the Winter semester.

*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 Egg Producers' Marketing Board 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* The Ontario Egg Producers' Marketing Board

*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:* 6 awards of \$1,000

**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 and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* Ontario Federation of Agriculture

*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. A student may receive up to three bursaries annually (\$1,500). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 12 awards of \$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. Awarded in the Winter semester.

*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.) to Student Financial Services by October 7. Awarded in the Winter semester.

*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]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

*Donor(s):* Office of Registrarial Services

*Qualification(s):* Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

*Amount:* Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. Alumni Association

**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:** 3 awards of \$500

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The University Police

**Qualification(s):** Full-time undergraduate and graduate students who have financial need.

**Amount:** Several of various amounts

**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. Typically, awarded in the Winter semester.

**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

## In-course Travel Grants

### A.W. Archibald Memorial Travel Grant [T4541]

Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.

**Donor(s):** A.W. Archibald, O.A.C. '33

**Qualification(s):** Undergraduate students in any O.A.C. 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 up to \$1000

### Aeroplan International Travel Grant [T0604]

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

**Donor(s):** Aeroplan

**Qualification(s):** Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

**Amount:** 1 plane ticket per each semester

### Arthur D. Latonnell Undergraduate Travel Grants [T0058]

An endowment fund established in memory of Arthur D. Latonnell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latonnell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

### Canada's Outdoor Farm Show Travel Grants [T3536]

Established by Canada's Outdoor Farm Show and the O.A.C. Alumni Foundation, 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 February 1. The letter should outline the reasons for participating in the meeting, competition, etc., and include a brief statement of learning objectives and appropriate involvement in student activities. Upon successful return from travel opportunity, student(s) should be willing to present report to classmates and/or faculty. ACCESS AWARD

**Donor(s):** Canada's Outdoor Farm Show

**Qualification(s):** Undergraduate students in O.A.C. who have completed semester 4 in Agricultural Science or Agricultural Business or who have completed semester 2 of the Diploma in Agriculture program (Alfred, Guelph, Kemptville, Ridgetown).

**Amount:** 1 award of \$1,000

### Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

### Charles and Betty Webster International Study Scholarships [T0575]

Established by Elizabeth Comper in memory of her parents, Charles Webster, O.A.C. '36 and Betty Webster. Submit a letter of no more than two pages outlining the intended international exchange or study abroad program, reasons for choosing the program and the anticipated benefits of participation in the program. Letters should also include a brief summary of extracurricular and student related activities. Letters of recommendation will also be considered as part of the application package. Selection will be based on the international study program benefit to individual applicant and leadership potential based on information submitted in the application. Apply to O.A.C. Awards office by April 1, no more than two semesters prior to the commencement of the travel program.

**Donor(s):** Mrs. Elizabeth Comper

**Qualification(s):** Students enrolled in B.Sc.(Agr) with a minimum 75% cumulative average who intend to participate in an international exchange program or semester abroad.

**Amount:** 1 award of \$1,300

### D & G Hart Travel Grant [T0601]

Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.

**Donor(s):** Family of Douglas and George Hart

**Qualification(s):** Students currently enrolled in any O.A.C program with a minimum 70% cumulative average who intend to participate in travel related to course study.

**Amount:** 1 award of up to awards of \$1,000

### Frank E. Wolff International Scholarships [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. To be considered for this award, students must apply for the J. Ross Cavers International Scholarship by April 1.

**Donor(s):** Ron Wolff - friends and associates

**Qualification(s):** Students who have an interest in International Agriculture. The scholarships will be awarded to students with a minimum of a 70% standing over the first 4 semester levels of the B.Sc.(Agr.) program. Students must register for the International Field Study course (AGR\*2500) in the year the award is received.

**Amount:** Up to 9 awards of \$600

**H.C. Mason Travel Scholarships [T0598]**

In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Mr. F.W. Bray

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study

**Amount:** various awards up to \$1,500

**J. Ross Cavers Study Abroad Scholarship [T0051]**

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

**Donor(s):** Class of O.A.C. '53

**Qualification(s):** Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

**Amount:** 3 awards of \$1,800

**J.D. Cunningham Travel Grant [T0605]**

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

**Donor(s):** Ontario Food Protection Association

**Qualification(s):** Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

**Amount:** 1 award of \$2,000

**Lorne Page Memorial Travel Grants [T0475]**

Established by Shirley Page in memory of her husband Lorne, a staff member in Animal and Poultry Science for over 34 years. Apply by letter to the Chair, Department of Animal and Poultry Science by February 1, outlining the nature of the conference and your contribution to the program in the department. One or two awards totalling \$1,000.

**Donor(s):** Shirley Page

**Qualification(s):** Students in Animal Biology or in Agricultural Science with an interest in animal production who have completed 12.50 credits with satisfactory academic standing and who are planning to attend a student conference or activity related to animal production.

**Amount:** 1 award of \$1,000

**Massey Fund Travel Scholarships [T0417]**

Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.

**Donor(s):** O.A.C. Awards Committee

**Qualification(s):** O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.

**Amount:** 1 award of \$750

**Michael Chepesuik International Travel Grant [T0373]**

Offered in memory of the late Michael W. Chepesuik, O.A.C.'30. Application by letter should be made to the O.A.C. Dean's Office by April 15, and include a description of the study program. Travel grant (or grants). Up to 80% of the actual travel costs associated with the study outside of Canada program will be covered up to a maximum of \$1,000 per student.

**Donor(s):** Mr. Michael W. Chepesuik

**Qualification(s):** Undergraduate or graduate students pursuing studies in Food Agriculture and Resource Economics and who are studying outside of Canada for one or more semesters.

**Amount:** 1 award of \$1,000

**O.A.C. '05 Excellence Travel Grant [T0060]**

In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

**Donor(s):** Class of OAC 1905 and the Class of OAC 2005

**Qualification(s):** Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.

**Amount:** 1 award of \$300

**O.A.C. '47 Travel Bursaries [T3505]**

Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD

**Donor(s):** O.A.C. '47

**Qualification(s):** O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 awards of \$600

**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 April 1, 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 \$1,450

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

<b>Robb Travel Grants [T3028]</b>	
These travel grants have been provided in recognition of her love of agriculture, by the estate of Martha Robb, Paris, Ontario. Apply to the Dean, O.A.C. by April 15. Varying amounts (80% of the travel costs will be covered up to \$750 per student).	
<i>Donor(s):</i>	<b>The estate of Martha Robb</b>
<i>Qualification(s):</i>	O.A.C. students who are attending another university on a Letter of Permission.
<i>Amount:</i>	Several varies
<b>Roderick Long International Travel Grant [T0360]</b>	
Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associate with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.	
<i>Donor(s):</i>	<b>Mr. Roderick W. Long</b>
<i>Qualification(s):</i>	O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters
<i>Amount:</i>	Several awards of \$1,500
<b>University of Guelph Travel Scholarships [T0421]</b>	
The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.
<i>Amount:</i>	Several up to \$1,000
<b>Varley and Lyon Exchange Scholarships [T0298]</b>	
Miss Bertha Manent of New York City has established five or more Mrs. Lillie-Jane Lyon Varley and Clarence D. Lyon Exchange scholarships. Apply to Student Financial Services by April 1, including a letter from the Dean or Director approving the proposed program of study.	
<i>Donor(s):</i>	<b>Miss Bertha Manent</b>
<i>Qualification(s):</i>	O.A.C. students 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. Such course of study must lead to the degree of B.Sc.(Agr.), B.Comm. in Agricultural Business or the Diploma in Agriculture at the University of Guelph.
<i>Amount:</i>	3 awards of \$750

## Bachelor of Science in 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

<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Association of Professional Engineers of Ontario Scholarship [E0016]</b>	
Awarded by the Ontario Professional Engineers Foundation for Education, on the recommendation of the University's Faculty of Council to Ontario Scholars entering an accredited engineering program. Application not required.	
<i>Donor(s):</i>	<b>Professional Engineers of Ontario.</b>
<i>Qualification(s):</i>	Students entering the B.Sc.(Eng.) program who are well-rounded, exhibit characteristics of leadership and have demonstrated academic excellence.
<i>Amount:</i>	2 awards of \$1,500
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>Danone Crystal Springs Water Resources Engineering Entrance Scholarships [E0514]</b>	
Established through the generosity of Danone Crystal Springs, a leading distributor of bottled water. Eligible students will be invited to submit an essay to the Chair of the School of Engineering Awards Committee by October 1.	
<i>Donor(s):</i>	<b>Danone Crystal Springs</b>
<i>Qualification(s):</i>	Students entering the Water Resources Engineering program with the highest admission average who have completed a satisfactory three-page essay on a water resources protection topic of the applicants' choice.
<i>Amount:</i>	2 awards of \$2,000
<b>December 6th Memorial Scholarship [E0005]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Physical and Engineering Science. 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. Demonstrated financial need may also be considered.
<i>Amount:</i>	1 2250 (\$750 in each of semesters 1, 3 and 5).

<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Earl B. MacNaughton Entrance Scholarships [E0172]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students with high academic standing, entering an honours program in the College of Physical and Engineering Science. Emphasis will be given to academic achievement in high school science and mathematics.
<i>Amount:</i>	4 awards of \$1,000
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

**Amount:** 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**Phyllis Mary Carpenter Scholarship [E0503]**

Established through the generosity of The Carpenter Family Fund, administered by the Hamilton Community Foundation to recognize academic excellence. Application not required.

**Donor(s):** The Carpenter Family Fund, administered by the Hamilton Community Foundation

**Qualification(s):** Full-time student entering the Environmental Engineering Undergraduate Program from a publicly funded Ontario secondary school. Awarded to the student with the highest entering admission average. Preference will be given to students from the Hamilton or Burlington area.

**Amount:** 1 award of \$1,500

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

**Donor(s):** Ross and Mary Lou Klopp

**Qualification(s):** Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

**Amount:** 1 award of \$500

**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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc.

**Qualification(s):** Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. 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

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic merit.

**Amount:** 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

**Donor(s):** Rol-Land Farms

**Qualification(s):** Outstanding entering undergraduate degree students 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

**Amount:** 150 awards of \$9,000

## Entrance Awards with Financial Need

### Harvey Graham Bursary [E3030]

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

### 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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

### 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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

## In-course Scholarships

### Association of Professional Engineers Medal [C0019]

Application 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 Gold medal

### Association of Professional Engineers of Ontario Scholarships [I0018]

Apply to the Chair of the Awards Committee, School of Engineering, by March 31.

*Donor(s):* **Professional Engineers of Ontario**

*Qualification(s):* Students in their 2nd and 3rd years of an accredited engineering program. One award is given for high academic standing and the other for a combination of academic excellence and demonstrated leadership qualities.

*Amount:* 2 awards 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 April 1.

*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

### Canadian Federation of University Women/Guelph Scholarship [I0294]

The Guelph Chapter of the Canadian Federation of University Women provides this annual scholarship. Application not required.

*Donor(s):* **The Guelph Chapter of the Canadian Federation of University Women**

*Qualification(s):* Female student registered in Year 3 in the Fall semester in either B.Sc.(Eng.), B.A. (College of Physical and Engineering Science) or B.Sc.(College of Physical and Engineering Science) who has the highest cumulative average. Preference will be given to a student who has graduated from a secondary school in Wellington County.

*Amount:* 1 award of \$2,000

### CFRU Volunteer Award [I0215]

Apply to the CFRU Board of Governors by April 30.

*Donor(s):* **Station Manager, CFRU**

*Qualification(s):* Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.

*Amount:* 2 awards of \$250

### 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 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

### College of Physical Engineering Science Academic Scholarship [I0073]

Application not required.

*Donor(s):* **College of Physical and Engineering Science**

*Qualification(s):* Offered in the Winter semester to students who have completed at least 15.0 course credits in a College of Physical and Engineering Science program and have excellent grades but have not received awards recently.

*Amount:* 2 awards of \$250

### College of Physical Engineering Science Graduation Prize [C0075]

The winner will be selected in May from all students who have completed the program in the previous twelve months. Application not required. One award of \$250 and a commemorative plaque.

*Donor(s):* **College of Physical and Engineering Science**

*Qualification(s):* Student graduating with the highest cumulative average from an honours B.Sc. program in a Physical and Engineering Science area.

*Amount:* 1 award of \$250, 1 Commemorative plaque

### College of Physical Engineering Science Scholarship [I0076]

Awarded in the Fall semester to a student who has completed semester 6 in the previous Fall, Winter or Spring semesters and who is enrolled in Year 4 of a College of Physical and Engineering Science program. Application not required.

*Donor(s):* **College of Physical and Engineering Science**

*Qualification(s):* Recipients will be selected on the basis of a high average (minimum 80% average required) in courses normally taken in Year 3.

*Amount:* 1 award of \$250

### 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 not required.

*Donor(s):* **School of Engineering**

*Qualification(s):* Full-time student registered in either Environmental Engineering or Water Resources Engineering with the highest cumulative average who has completed a minimum of 8.5 credits at the beginning of semester 4.

*Amount:* 1 award of \$400

<b>Deans' Scholarships [I0323]</b>	
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i>	150 awards of \$1,000
<b>E.B. MacNaughton Convocation Prize [C0171]</b>	
Established by the College of Physical and Engineering Science to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application not required. One award of a plaque-mounted medal and \$250.	
<i>Donor(s):</i>	<b>The College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	The College of Physical and Engineering Science nominee for the Winegard Medal.
<i>Amount:</i>	1 award of \$250, 1 Plaque-mounted medal
<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>	
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<i>Donor(s):</i>	<b>Mrs. George A. Gray</b>
<i>Qualification(s):</i>	Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i>	2 awards of \$1,250
<b>Governor General's Medal [C0044]</b>	
Established by the Office of the Governor General of Canada. Application not required.	
<i>Donor(s):</i>	<b>The Chancellery</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Silver medal
<b>Helen Grace Tucker Design Awards [C0365]</b>	
Established by a bequest of Helen Grace Tucker, 65 Engineering, who was co-inventor of a number of patented sensor and control components and co-author of many international publications. Application not required.	
<i>Donor(s):</i>	<b>Estate of Helen Grace Tucker, O.A.C.</b>
<i>Qualification(s):</i>	Graduating student in each of the four engineering programs. The winners will be selected on the basis of best performance (at least 80%) in ENGG*2100, ENGG*3100 and the final design course.
<i>Amount:</i>	4 awards of \$500
<b>International Undergraduate Scholarship [I0577]</b>	
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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.	
<i>Donor(s):</i>	<b>International Student Organization (ISO)</b>
<i>Qualification(s):</i>	Full-time International 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 75%, and is registered at the time of application.
<i>Amount:</i>	1 award of \$1,000

<b>Jim MacKenzie Scholarship [I0602]</b>	
Established to honour of Jim MacKenzie's retirement as President and C.E.O. in 2005. Selection will be based on a combination of academic achievement and creative or innovative thought in the area of energy conservation as demonstrated by one of the following: co-op work experience (documented in work report); class project (documented in written report); involvement in energy-related projects/activities associated with the University of Guelph or the City of Guelph (documented in written report); or 500-word essay on energy conservation. Apply to the Chair, School of Engineering Awards Committee by October 1 with documentation as suggested above.	
<i>Donor(s):</i>	<b>Guelph Hydro</b>
<i>Qualification(s):</i>	Students registered in the Environmental Engineering program who have completed between 15 and 17 credits and at least 2 co-op work terms.
<i>Amount:</i>	1 award of \$1,500
<b>John Deere Canada Ltd. Environmental Engineering Scholarship [I0548]</b>	
Established by the generosity of the John Deere Corporation to a full-time environmental engineering student who has completed a minimum of 17.0 credits (with a minimum of 5.0 credits in the previous year). Apply before September 15 with a letter and a resume to the Chair of the School of Engineering Awards Committee.	
<i>Donor(s):</i>	<b>John Deere Foundation of Canada</b>
<i>Qualification(s):</i>	Selection will be based on a combination of academic achievement and contributions to the community, the University, and the School of Engineering through the participation in and leadership of extracurricular activities.
<i>Amount:</i>	2 awards of \$1,000
<b>John Eccles Scholarship [I0093]</b>	
Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Student Housing Services</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$600
<b>Kenneth W. Hammond Award [I0045]</b>	
The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.	
<i>Donor(s):</i>	<b>Kenneth W. Hammond</b>
<i>Qualification(s):</i>	Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.
<i>Amount:</i>	1 award of \$1,000
<b>Kip Hunter Prize [I0139]</b>	
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 the end of the 12th week of the Winter semester.	
<i>Donor(s):</i>	<b>Faculty, students and staff of the Philosophy Department</b>
<i>Qualification(s):</i>	Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
<i>Amount:</i>	1 Book prize
<b>Knut Karl Grimstad Memorial Scholarship [I0116]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Mrs. Anne Grimstad</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	2 awards of \$600

<b>Lambda Foundation Scholarship in LBGT Studies [I0591]</b>	
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.	
<i>Donor(s):</i>	<b>Lambda Foundation and other donors</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000
<b>Lange and Prokipcak Chemistry Scholarship [I0528]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues</b>
<i>Qualification(s):</i>	Student in C.P.E.S. with the highest average grade in CHEM*1040,1050 and 2700 who has completed a minimum of 10.0 credits up to a maximum of 14.75 credits.
<i>Amount:</i>	1 award of \$1,000
<b>Leonard Conolly Exchange Student Scholarship [I0446]</b>	
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.	
<i>Donor(s):</i>	<b>Students, staff, faculty and friends of Dr. Leonard Connolly</b>
<i>Qualification(s):</i>	Full-time visiting exchange undergraduate or graduate 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). 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.
<i>Amount:</i>	1 award of \$1,000
<b>O.A.C. '55 Scholarships [I0064]</b>	
Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>O.A.C. '55</b>
<i>Qualification(s):</i>	Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.
<i>Amount:</i>	1 award of \$2,000
<b>Priscilla and Stanford Reid Trust Prize [I0597]</b>	
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.	
<i>Donor(s):</i>	<b>Priscilla and Stanford Reid Trust Fund</b>
<i>Qualification(s):</i>	Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
<i>Amount:</i>	1 award of \$500

<b>Stephanie Wilken Volunteer Award [I0449]</b>	
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.	
<i>Donor(s):</i>	<b>Bev and Darlene Wilken</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000
<b>Taggart Scholarship in Biological Engineering [I0278]</b>	
Apply by letter and a resume to the Chair of the School of Engineering Awards Committee by October 1.	
<i>Donor(s):</i>	<b>Ontario Agriculture College Fund</b>
<i>Qualification(s):</i>	Student who has completed 17.25 credits of the Biological Engineering in the B.Sc.(Eng) program. Academic standing and demonstration of leadership qualities will be used to select the recipient from eligible candidates.
<i>Amount:</i>	1 award of \$600
<b>The Jack and Lillian MacDonald Scholarship [E0379]</b>	
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 persons. Apply by letter to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Jack and Lillian MacDonald</b>
<i>Qualification(s):</i>	In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.
<i>Amount:</i>	1 award of \$900
<b>Thomas H. Peters Scholarship [I0233]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Friends and associates of Thomas H. Peters</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$250
<b>Toronto District Beekeeper's Association Scholarship [I0285]</b>	
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application not required.	
<i>Donor(s):</i>	<b>Mr. Jack Robinson</b>
<i>Qualification(s):</i>	The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
<i>Amount:</i>	1 award of \$500
<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000

<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400

<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal

<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal

### In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000

<b>C.P.E.S. Dean's Scholarship - ACCESS [I4527]</b>	
Established by a number of industrial, commercial and public sector corporations, 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. Awarded in the Winter semester. This award may be held once only. ACCESS AWARD	
<i>Donor(s):</i>	<b>Established by a number of industrial, commercial and public sector corporations</b>
<i>Qualification(s):</i>	Students with demonstrated financial need registered in any major program in C.P.E.S. in, or beyond, second year. A minimum 80% cumulative average is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$750

<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000

<b>Earl B. MacNaughton C.P.E.S. ACCESS Scholarships [I4172]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students currently registered in the final year of an honours program in the College of Physical and Engineering Science 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).
<i>Amount:</i>	2 awards of \$1,000

<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000

<b>Erin Demers Memorial Scholarship [I0406]</b>	
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 April 1 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.	
<i>Donor(s):</i>	<b>Family and friends of Erin Katrina Demers</b>
<i>Qualification(s):</i>	A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.
<i>Amount:</i>	1 award of \$2,000

<b>Euclid-Hitachi Scholarships [I4517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Euclid-Hitachi of Canada Ltd.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Graham Family Incentive Scholarship [I4506]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Harvey Graham O.A.C. '39</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$5,000

<b>Guelph Varsity Athletic Accessibility Scholarship [I0518]</b>	
Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<b>Donor(s):</b>	<b>Alumni and friends of the University of Guelph</b>
<b>Qualification(s):</b>	Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.
<b>Amount:</b>	2 awards of \$1,250

<b>Tara Lynn Giuliani Memorial Award [I0375]</b>	
In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.	
<b>Donor(s):</b>	<b>The Giuliani Family</b>
<b>Qualification(s):</b>	Most academically promising applicant with a demonstrated disability and having financial need.
<b>Amount:</b>	1 award of \$500

<b>University of Guelph Retiree Association Degree Scholarship [I0569]</b>	
This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.	
<b>Donor(s):</b>	<b>University of Guelph Retirees Association (U.G.R.A.)</b>
<b>Qualification(s):</b>	Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.
<b>Amount:</b>	1 award of \$1,000

<b>William &amp; Nona Heaslip Scholarship [I0589]</b>	
Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.	
<b>Donor(s):</b>	<b>The William and Nona Heaslip Foundation</b>
<b>Qualification(s):</b>	Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.
<b>Amount:</b>	2 awards of \$15,000

### In-course Awards with Financial Need

<b>Bette Stephenson Accessibility Bursary [I3054]</b>	
In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.	
<b>Donor(s):</b>	<b>University of Guelph</b>
<b>Qualification(s):</b>	Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.
<b>Amount:</b>	3 awards to a maximum of \$1,500

<b>Brinson Partners Inc. Bursaries [I3526]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<b>Donor(s):</b>	<b>Brinson Partners Inc.</b>
<b>Qualification(s):</b>	Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<b>Amount:</b>	2 awards of \$1,500

<b>Burnbrae Farms Bursaries [I3525]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<b>Donor(s):</b>	<b>Burnbrae Farms</b>
<b>Qualification(s):</b>	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).
<b>Amount:</b>	2 awards of \$1,500

<b>Class of '72: 25th Reunion Bursaries [I3512]</b>	
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 by October 7. Awarded in the Winter semester. ACCESS AWARD	
<b>Donor(s):</b>	<b>Class of '72: 25th Reunion</b>
<b>Qualification(s):</b>	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).
<b>Amount:</b>	3 awards of \$1,000

<b>Credit Valley Conservation Authority Foundation Bursary [I3007]</b>	
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.	
<b>Donor(s):</b>	<b>Credit Valley Conservation Authority Foundation</b>
<b>Qualification(s):</b>	Full-time student registered in B.A. Geography, B.Sc. Geographic Information Systems and Environmental Analysis, B.Sc. Engineering (Water Resource Engineering), B.Sc.(Agr.) Agroecosystem Management or B.Sc.(Env.) Geography majors with demonstrated financial need. Preference will be given to a student who resides in a member municipality of the Credit Valley Authority Foundation.
<b>Amount:</b>	1 award of \$500

<b>Elizabeth Burton Bursaries [I3503]</b>	
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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.	
<b>Donor(s):</b>	<b>Mrs. Elizabeth Burton</b>
<b>Qualification(s):</b>	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).
<b>Amount:</b>	Several awards of up to \$2000

<b>Gryphon Investment Council Bursaries [I3513]</b>	
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<b>Donor(s):</b>	<b>Gryphon Investment Council Inc.</b>
<b>Qualification(s):</b>	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).
<b>Amount:</b>	2 awards of \$1,500

<b>Guelph Compassionate Health Bursary [I3061]</b>	
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.	
<b>Donor(s):</b>	<b>Student Health and Dental Plan Reserve</b>
<b>Qualification(s):</b>	All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.
<b>Amount:</b>	Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s): Undergraduate Students**

**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 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.

**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. Awarded in the Winter semester. 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

**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):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

**Donor(s): Mrs. Norma L. Valeriotte**

**Qualification(s):** Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.

**Amount:** Several 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. Awarded in the Winter semester.

**Donor(s): Family and friends of Irvine and Grace B.L.A.ck**

**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

**Lindsay W. Christie Bursary [I3004]**

Made available by the family of Lindsay W. Christie. Apply by confidential letter to Chair, Awards Committee, School of Engineering by December 1.

**Donor(s): Family of Lindsay W. Christie (Fastforms Inc.)**

**Qualification(s):** Full-time students in the B.Sc.(Eng.) program with a demonstrated financial need that diminishes personal involvement in the program and/or participation in personal development through undergraduate conferences or congresses that entail expenses for travel and accommodation.

**Amount:** Several awards totalling \$1,000

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s): Estate of Mary I. Whitelock**

**Qualification(s):** All undergraduate, graduate or O.A.C. diploma 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

**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. Awarded in the Winter semester. ACCESS AWARD.

**Donor(s): O.A.C. Class of '55**

**Qualification(s):** Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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 \$500

**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. Awarded in the Winter semester.

**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

**Procor Ltd. Access Bursaries in Engineering [I3528]**

Procor Ltd., with the aid of the Ontario government's OSOTF program, has provided funds for one \$900 bursary. ACCESS AWARD

**Donor(s): Procor Ltd.**

**Qualification(s):** Awarded to students with demonstrated financial need registered in any of the engineering programs at or beyond the third semester level. Students must have a minimum 65% cumulative average. Apply to Student Financial Services with a completed Needs Assessment Form by October 7.

**Amount:** 1 award of \$900

**Robert Auger Humanitarian Bursary [I3058]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

**Donor(s): Office of Registrarial Services**

**Qualification(s):** Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

**Amount:** Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The University Police

**Qualification(s):** Full-time undergraduate and graduate students who have financial need.

**Amount:** Several of various amounts

**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. Typically, awarded in the Winter semester.

**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

**In-course Travel Grants****Aeroplan International Travel Grant [T0604]**

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

**Donor(s):** Aeroplan

**Qualification(s):** Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

**Amount:** 1 plane ticket per each semester

**Arthur D. Latornell Undergraduate Travel Grants [T0058]**

An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latornell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

**Geography Field Trip Travel Grant [T0584]**

In honour of the retirement of Dr. G.T. Bloomfield, former faculty member and Chair of the department of Geography from 1977 to 1982. Upon registration for GEOG \*4690, students will submit to the chair of the department a one essay outlining the benefits and expectations of the field course to their career as a geographer and one letter of reference from a geography professor.

**Donor(s):** Alumni, Colleagues, and Friends of Dr. G.T. Bloomfield

**Qualification(s):** Full-time students enrolled in the major honours program (B.A.H; B.Sc.(ESS); B.Sc.(Env)) in the Department of Geography who have completed 12.5 course credits and have an overall average of at least 70% at the time of registration for GEOG \*4690

**Amount:** 1 award of \$450

**Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]**

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$1,000

## 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

<b>Amos &amp; William Lowe Memorial Scholarship [E0158]</b>	
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 not required. Two awards of \$1,250 paid in two installments of \$625.	
<i>Donor(s):</i>	<b>William B. Lowe and Amos Edgar Lowe</b>
<i>Qualification(s):</i>	Student entering any of the undergraduate degree programs of the Ontario Agricultural College.
<i>Amount:</i>	2 awards of \$1,250
<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>December 6th Memorial Scholarship [E0005]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Physical and Engineering Science. 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. Demonstrated financial need may also be considered.
<i>Amount:</i>	1 2250 (\$750 in each of semesters 1, 3 and 5).
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200

<b>Earl B. MacNaughton Entrance Scholarships [E0172]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students with high academic standing, entering an honours program in the College of Physical and Engineering Science. Emphasis will be given to academic achievement in high school science and mathematics.
<i>Amount:</i>	4 awards of \$1,000
<b>Elite Swine Entrance Scholarship [E0532]</b>	
This award is provided by Elite Swine Inc. to assist students entering an O.A.C. undergraduate Program. High schools will forward nominations to the O.A.C. Awards Committee by September 15.	
<i>Donor(s):</i>	<b>Elite Swine Inc.</b>
<i>Qualification(s):</i>	High school graduates who have applied to O.A.C. undergraduate programs, based on admission average, contributions to their schools and communities and on their potential to become leaders in society. Preference will be given to students with a strong interest in animal science, particularly swine production.
<i>Amount:</i>	5 awards of \$1,000
<b>Gordon McNally Memorial Award [E0203]</b>	
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. Applications by students or recommendations by high school teachers should be made by letter to the Associate Registrar, Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>Jean and Peter Gower</b>
<i>Qualification(s):</i>	Students entering any undergraduate program in the College of Biological Sciences. The recipient will be selected on the basis of academic performance and demonstration of outstanding contributions to extracurricular activities and/or community services.
<i>Amount:</i>	1 award of \$500
<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>James MacMillan Memorial Scholarship [I0494]</b>	
Established in memory of James MacMillan, his great uncle, by Austin Conway of Toronto. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7.	
<i>Donor(s):</i>	<b>Austin Conway</b>
<i>Qualification(s):</i>	Kemptville College graduate with high academic standing (a minimum 75% cumulative average) who registers in the O.A.C. degree program in Agriculture or in Agriculture and Business. Financial need may also be considered.
<i>Amount:</i>	1 award of \$2,500

**Lincoln Alexander Chancellor's Scholarship [E0493]**

These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** Many Donors

**Qualification(s):** Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.

**Amount:** 2 awards of \$26,000

**McArthur-Humphries Scholarship [E0183]**

Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.

**Donor(s):** Wilhelmina McArthur-Humphries Trust Fund

**Qualification(s):** Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.

**Amount:** 12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**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 undergraduate or graduate student. Selection will be based on academic performance, letters of reference and an assessment of the admission application package. Application not required.

**Donor(s):** Mrs. Helen Quinn (O.A.C. '35)

**Qualification(s):** Entering semester one of an O.A.C. program to an undergraduate or graduate international full-time student or to an international exchange student with a preference to those students from developing nations.

**Amount:** 1 award of \$1,500

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

**Donor(s):** Ross and Mary Lou Klopp

**Qualification(s):** Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

**Amount:** 1 award of \$500

**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. The winner is chosen from the list of alternates for the President's Scholarships. President's Scholarship nominees 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). Deadline to submit the application is May 1. ACCESS AWARD.

**Donor(s):** The Blount Foundation, Inc.

**Qualification(s):** Students from the Province of Ontario, with demonstrated financial need, entering one of the following programs on an annual rotation: B.A. in 98/99, then B.A.Sc., B.Comm., B.Sc., B.Sc.(Agr.), B.Sc.(Eng.), B.Sc.(Env.). Recipients must maintain a B+ average or higher, continue to demonstrate financial need and be full-time students in order to qualify for subsequent installments. During the summer after the 3rd year, the scholars will propose, to Student Financial Services, an enrichment experiential undertaking related to the student's field of study; the grant application should include a detailed budget. A grant of up to \$1,200 is available to support the undertaking, subject to continuing financial need and approval of the proposal by Student Financial Services. Upon completion, the student will write a report of the experience to Student Financial Services. 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

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic merit.

**Amount:** 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

**Donor(s):** Rol-Land Farms

**Qualification(s):** Outstanding entering undergraduate degree students 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

**Amount:** 150 awards of \$9,000

## Entrance Awards with Financial Need

### 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). Deadline to submit the application is May 1. ACCESS AWARD. One award of \$6,000 (\$1,500 annually for 4 years).

*Donor(s):* **W. Roy Hindle and family**

*Qualification(s):* An entering O.A.C. degree student who has 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

### Harvey Graham Bursary [E3030]

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

*Donor(s):* **Harvey Graham, O.A.C. '39**

*Qualification(s):* Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

*Amount:* 1 award of \$1,700

### 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. Students who have applied to the University of Guelph will receive an application form.

*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 of \$1,000, Several awards of \$3,000

### 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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

*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:* 12 awards of \$500

## In-course Scholarships

### Bill Taylor Memorial Scholarship [I0280]

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.

*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 by April 1.

*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.

*Amount:* 1 award of \$500

### 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 to Student Financial Services by April 1.

*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 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

### C.M. and D.J. Switzer Scholarships [I0276]

Apply by April 1 to Student Financial Services.

*Donor(s):* **C.M. and D.J. Switzer**

*Qualification(s):* One to a student who has completed semester 2 of the Diploma in Agriculture program and one to a student who has completed semester 4 of a degree program in O.A.C. Recipients will have a minimum of 70% standing and have demonstrated outstanding leadership ability in O.A.C. student organizations, class executives and College Royal.

*Amount:* 1 award of \$2,000

### Canadian Agri-Marketing Association (Ontario) Scholarship [I0541]

Provided by the Canadian Association of Agri-Marketing Association (Ontario). Apply to the O.A.C. awards Committee by April 1 with a summary of participation in the Ag Ec & Biz Society and in agri-marketing initiatives as well as a letter of recommendation from a faculty member.

*Donor(s):* **Canadian Agri-Marketing Association (Ontario)**

*Qualification(s):* Student who has completed a minimum of 10.0 credits with a minimum cumulative average of 70% who are members of O.A.C. and the Ag Ec & Biz Society. Selection will be based on a combination of academic achievement and a demonstrated interest in agri-marketing.

*Amount:* 1 award of \$1,500

### Certified General Accountants Award for Excellence Prize [C0025]

Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.

*Donor(s):* **Certified General Accountants Association of Ontario**

*Qualification(s):* Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGECE\*2220; Management Accounting AGECE\*2230; and Intermediate Accounting AGECE\*3330.

*Amount:* 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

### CFRU Volunteer Award [I0215]

Apply to the CFRU Board of Governors by April 30.

*Donor(s):* **Station Manager, CFRU**

*Qualification(s):* Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.

*Amount:* 2 awards of \$250

### Charles McGowan Memorial Prize [C0187]

Established in memory of the late Lieutenant Charles McGowan. Application not required.

*Donor(s):* **Charles McGowan Memorial Fund**

*Qualification(s):* Outstanding graduating student in an O.A.C. degree program.

*Amount:* 1 award of \$300

<b>Class of '51 O.A.C. Leadership Awards [C0063]</b>
Established by Year '51 O.A.C., on the occasion of its 45th anniversary. At the discretion of the O.A.C. Awards Committee students may be selected before graduation. Application not required.
<i>Donor(s):</i> <b>Year '51 O.A.C.</b>
<i>Qualification(s):</i> Students graduating from the degree program in a major in an O.A.C. department who have a 70% standing in the final year of study and who have demonstrated leadership in the College or University extracurricular activities.
<i>Amount:</i> 4 awards of \$1,000
<b>Class of '67 O.A.C. Centennial Scholarship [I0067]</b>
Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Class of O.A.C. '67</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>Class of 1970 Scholarship [I0424]</b>
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 not required.
<i>Donor(s):</i> <b>Class 1970: 25th Reunion Gift</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,400
<b>College of Physical Engineering Science Academic Scholarship [I0073]</b>
Application not required.
<i>Donor(s):</i> <b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i> Offered in the Winter semester to students who have completed at least 15.0 course credits in a College of Physical and Engineering Science program and have excellent grades but have not received awards recently.
<i>Amount:</i> 2 awards of \$250
<b>College of Physical Engineering Science Graduation Prize [C0075]</b>
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application not required. One award of \$250 and a commemorative plaque.
<i>Donor(s):</i> <b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i> Student graduating with the highest cumulative average from an honours B.Sc. program in a Physical and Engineering Science area.
<i>Amount:</i> 1 award of \$250, 1 Commemorative plaque
<b>College of Physical Engineering Science Scholarship [I0076]</b>
Awarded in the Fall semester to a student who has completed semester 6 in the previous Fall, Winter or Spring semesters and who is enrolled in Year 4 of a College of Physical and Engineering Science program. Application not required.
<i>Donor(s):</i> <b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i> Recipients will be selected on the basis of a high average (minimum 80% average required) in courses normally taken in Year 3.
<i>Amount:</i> 1 award of \$250
<b>College of Social Science Alumni Heritage In-Course Scholarships [I0492]</b>
Established in recognition of the valuable contributions made over many years by College of Social Science alumni and the Alumni Association to the life and vitality of the University. Awarded in the Fall semester. Application not required.
<i>Donor(s):</i> <b>College of Social Science Alumni</b>
<i>Qualification(s):</i> Students registered in the C.S.A.H.S. with the highest cumulative program average of at least 80.0% who have completed between 10.00 and 12.50 course credits and who registered in C.S.A.H.S. in the subsequent Fall Semester. One scholarship will be awarded to a full or part-time student registered in a program offered by each of the following six C.S.A.H.S. administrative and academic units: Economics, Geography, International Development Studies, Political Science, Psychology and Sociology and Anthropology. This scholarship may be held once only.
<i>Amount:</i> 6 awards of \$1,000

<b>Collins Barrow Award [I0040]</b>
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.
<i>Donor(s):</i> <b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i> Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i> 1 award of \$500
<b>CSAHS Student Volunteer Scholarship [I0482]</b>
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. Applications are available from the CSAHS Dean's Office. Apply to the CSAHS Dean's Office with a completed application form, 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, and 2 letters of recommendation by April 1. This scholarship will be awarded to the Student Volunteer of the year to help defray the costs associated with volunteerism. One award of \$350 (an equal amount will be awarded to the charitable organization of the recipient's choice).
<i>Donor(s):</i> <b>Harshman Fellowship Society and Pfizer Canada Inc.</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$350
<b>David F. Boyes Apiculture Scholarship [I0031]</b>
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.
<i>Donor(s):</i> <b>The Apiculture Club</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$150
<b>Deans' Scholarships [I0323]</b>
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.
<i>Donor(s):</i> <b>Board of Governors</b>
<i>Qualification(s):</i> Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i> 150 awards of \$1,000
<b>Dr. Michael R. Moss Scholarship [I0553]</b>
Established by the friends and colleagues of Dr. Michael R. Moss, the founding Associate Dean of the Faculty of Environmental Sciences. This scholarship is awarded to the student that has demonstrated the most significant increase in his/her cumulative average from 7.0 course credits to 14.0 course credits. Application not required.
<i>Donor(s):</i> <b>Friends and Colleagues of Dr. Michael Moss</b>
<i>Qualification(s):</i> Full-time students enrolled in the BSc(Env.) program with a minimum 14.0 course credits.
<i>Amount:</i> 1000 awards of \$1
<b>E.B. MacNaughton Convocation Prize [C0171]</b>
Established by the College of Physical and Engineering Science to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application not required. One award of a plaque-mounted medal and \$250.
<i>Donor(s):</i> <b>The College of Physical and Engineering Science</b>
<i>Qualification(s):</i> The College of Physical and Engineering Science nominee for the Winegard Medal.
<i>Amount:</i> 1 award of \$250, 1 Plaque-mounted medal

**Ellen Nilsen Memorial Award [I0047]**

Offered by the friends of Ellen Nilsen. Apply to the Director of the Collaborative International Development Studies Programme, Rm 702 MacKinnon Building, by October 7.

*Donor(s):* **The Friends of Ellen Nilsen**

*Qualification(s):* Academically outstanding woman from a developing country who is registered at the University of Guelph in an undergraduate or a graduate program and who has demonstrated a commitment to social change.

*Amount:* 1 award of \$1,500

**Evelyn Matheson Pepper Memorial Scholarship [I0538]**

The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.

*Donor(s):* **Ms. Barbara Stuart and Ms. Susan Pepper**

*Qualification(s):* Student who achieves the highest grade in the course FRHD\*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.

*Amount:* 1 award of \$1,000

**Floyd Roadhouse Prize in Analytical Chemistry [I0247]**

Presented in the Winter semester. Application not required.

*Donor(s):* **Colleagues, students and friends of Professor F.E.B. Roadhouse**

*Qualification(s):* Student with the highest grade in CHEM\*2400 Analytical Chemistry I in the previous calendar year, who is continuing in an honours major program administered by the Department of Chemistry. In the event of a tie, laboratory performance will be considered.

*Amount:* 1 award of \$200

**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. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Mrs. George A. Gray**

*Qualification(s):* Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**Gonder Family Centre for Students with Disabilities Volunteer Award [I0563]**

In recognition of the many students who volunteer their time and talents to assist their colleagues registered with the Centre for Students with Disabilities (CSD) and to encourage others to do so, Dr. John and Mrs. Katherine Gonder provide this award to a student who has volunteered in the CSD. The award will be made on the basis of the volunteer activities undertaken by the student at the CSD, 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 CSD (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 CSD.

*Amount:* 1 award of \$900

**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 CSAHS major of the B.Comm. program. Application not required.

*Donor(s):* **Dr. John and Mrs. Katherine Gonder**

*Qualification(s):* All students in the CSAHS 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 Centre for Students with Disabilities.

*Amount:* 1 award of \$900

**Governor General's Medal [C0044]**

Established by the Office of the Governor General of Canada. Application not required.

*Donor(s):* **The Chancellor**

*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:* 1 Silver medal

**Guelph Soap Company Scholarship [I0288]**

The Guelph Soap Company donates this scholarship towards tuition fees, which is awarded in the Winter semester. Application not required.

*Donor(s):* **Tricorp Chemical Specialties**

*Qualification(s):* Student enrolled in the organic chemistry courses CHEM\*3750 and CHEM\*3760 during the previous calendar year who has obtained the highest average in one Biochemistry course and two Organic Chemistry courses, and who is continuing in an honours major program administered by the Department of Chemistry.

*Amount:* 1 award of \$1,200

**H. Paul Jolly Award [I0193]**

Application 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

**Highdale Farms Scholarship [I0348]**

Apply to Student Financial Services, by April 1.

*Donor(s):* **Arthur Spoerri**

*Qualification(s):* Two awards are available for students in semesters 3 through 6 with at least a 75% cumulative average and whose primary area of study is related to the natural sciences. The first award is based on academic proficiency. The second award is based on academic proficiency and demonstrated leadership with preference given to students from Ottawa-Carleton, Dundas-Glenarry-Stormont, Grenville, Lanark, Prescott-Russell and Renfrew counties.

*Amount:* 2 awards of \$2,500

**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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

*Donor(s):* **International Student Organization (ISO)**

*Qualification(s):* Full-time International 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 75%, and is registered at the time of application.

*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 letter to the CSAHS Undergraduate Awards Committee, Dean's Office by April 1st, including a statement that outlines the student's experience working with the elderly in a volunteer capacity as well as extracurricular involvement the student may have and two letters of reference, one of which should be from someone who can speak to the student's volunteer experiences with the elderly, while the other should comment on the extracurricular activities of the student.

*Donor(s):* **Mr. Robert N. Carter and Family**

*Qualification(s):* Undergraduate student in the CSAHS who has completed at least 10.0 credits with a minimum 70% cumulative average and has made a significant contribution to the care of the elderly. Preference will be given to students in the BASc program majoring in Gerontology.

*Amount:* 1 award of \$1,000

<b>Jim Stokman Memorial Scholarship [I0386]</b>
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 to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Mrs. Jim Stokman</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$600
<b>John A. Archibald Memorial Scholarship [I0014]</b>
Awarded in memory of John A. Archibald, former Director of the Horticultural Research Institute of Ontario. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>The friends and associates of the late John A. Archibald</b>
<i>Qualification(s):</i> Outstanding student with an interest in courses in the Department of Land Resource Science who has completed semester 6. The recipient will be chosen on the basis both of high academic standing and participation in extracurricular activities.
<i>Amount:</i> 1 award of \$1,200
<b>John Eccles Scholarship [I0093]</b>
Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Student Housing Services</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$600
<b>Kenneth W. Hammond Award [I0045]</b>
The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.
<i>Donor(s):</i> <b>Kenneth W. Hammond</b>
<i>Qualification(s):</i> Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.
<i>Amount:</i> 1 award of \$1,000
<b>Kip Hunter Prize [I0139]</b>
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 the end of the 12th week of the Winter semester.
<i>Donor(s):</i> <b>Faculty, students and staff of the Philosophy Department</b>
<i>Qualification(s):</i> Any undergraduate who has registered for a philosophy course during the academic year in which the prize is awarded.
<i>Amount:</i> 1 Book prize
<b>Lambda Foundation Scholarship in LGBT Studies [I0591]</b>
This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LGBT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LGBT peoples. Preference will be given to an applicant who is involved in the LGBT 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 LGBT community and/or faculty support.
<i>Donor(s):</i> <b>Lambda Foundation and other donors</b>
<i>Qualification(s):</i> 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 (LGBT) studies, as broadly defined by the applicant.
<i>Amount:</i> 1 award of \$1,000

<b>Land Resource Science Academic Scholarship [C0425]</b>
Provided by the Land Resource Science Endowment fund. Application not required.
<i>Donor(s):</i> <b>Provided by the Land Resource Science Endowment Fund</b>
<i>Qualification(s):</i> Student graduating from any major in the department with the highest cumulative average.
<i>Amount:</i> 1 award of \$1,000
<b>Land Resource Science Achievement Scholarship [C0426]</b>
Provided by the Land Resource Science Endowment fund. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Provided by the Land Resource Science Endowment Fund</b>
<i>Qualification(s):</i> Student graduating from any major in the department with a minimum cumulative average of 70%. Preference will be given to students contributing to student life on campus and/or community activities.
<i>Amount:</i> 1 award of \$1,000
<b>Lange and Prokipcak Chemistry Scholarship [I0528]</b>
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. Application not required.
<i>Donor(s):</i> <b>Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues</b>
<i>Qualification(s):</i> Student in C.P.E.S. with the highest average grade in CHEM*1040,1050 and 2700 who has completed a minimum of 10.0 credits up to a maximum of 14.75 credits.
<i>Amount:</i> 1 award of \$1,000
<b>Leonard Conolly Exchange Student Scholarship [I0446]</b>
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.
<i>Donor(s):</i> <b>Students, staff, faculty and friends of Dr. Leonard Conolly</b>
<i>Qualification(s):</i> Full-time visiting exchange undergraduate or graduate 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). 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.
<i>Amount:</i> 1 award of \$1,000
<b>Mae McEwen Memorial Scholarship [I0185]</b>
Apply to Student Financial Services, by April 1.
<i>Donor(s):</i> <b>The estate of Mae McEwen</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,200
<b>Marion McKenzie Prizes for Outstanding Achievement in History [I0470]</b>
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*1010, HIST*2450, HIST*2602). Application not required.
<i>Donor(s):</i> <b>TBA</b>
<i>Qualification(s):</i> The recipient for HIST*1010 must have completed no more than 5.0 credits; the recipient for HIST*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST*2602, no more than 10.0 credits.
<i>Amount:</i> 3 awards of \$250

<b>Monroe Landon Memorial Scholarship [C0153]</b>
Preference will be given to a student residing in the region of Haldimand Norfolk. Apply by letter, with a transcript, to the Chair, Department of Integrative Biology by January 31 indicating experience in the field of botany/conservation.
<i>Donor(s):</i> <b>The friends of Monroe Landon</b>
<i>Qualification(s):</i> Students that have completed a minimum of 17.0 credits in honours Plant Biology or Ecology with a minimum cumulative average of 70% and demonstrates an active interest in the conservation of native species and field research.
<i>Amount:</i> 1 award of \$550
<b>O.A.C. '55 Scholarships [I0064]</b>
Provided by the class of O.A.C. '55. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>O.A.C. '55</b>
<i>Qualification(s):</i> Students who are registered in any O.A.C. degree program or students enrolled in the B.Sc.(Eng.) program and have completed semester 4. 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. Recipients must have a 70% minimum cumulative average.
<i>Amount:</i> 1 award of \$2,000
<b>O.A.C. Centennial Graduate Fellowships [C0209]</b>
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 Student Financial Services by April 1.
<i>Donor(s):</i> <b>Dean, O.A.C.</b>
<i>Qualification(s):</i> 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 are eligible for these fellowships. 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.
<i>Amount:</i> 2 awards of \$2,200
<b>O.A.C. Students' Federation Medal [C0217]</b>
Application not required.
<i>Donor(s):</i> <b>O.A.C.</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Medal
<b>Oxford County Pork Producers Scholarship (Degree) [I0531]</b>
The Oxford County Pork Producers have made available this scholarship. Apply to O.A.C. Awards Committee by April 1 with a letter of up to two pages in length including information about leadership, community involvement and pork industry involvement.
<i>Donor(s):</i> <b>Oxford County Pork Producers</b>
<i>Qualification(s):</i> Any student who has completed a minimum of 5.0 credits in an O.A.C. degree program with a minimum cumulative average of 70%, pork production background or interest in pork production/industry, and demonstrated leadership and/or community involvement. Preference will be given to students from Oxford County or surrounding area.
<i>Amount:</i> 1 award of \$1,000
<b>Priscilla and Stanford Reid Trust Prize [I0597]</b>
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.
<i>Donor(s):</i> <b>Priscilla and Stanford Reid Trust Fund</b>
<i>Qualification(s):</i> Any student submitting an essay on the history of Presbyterianism and/or Reformed tradition.
<i>Amount:</i> 1 award of \$500

<b>Robert Harcourt Scholarships [I0121]</b>
This fund was established by the late Mrs. R. Harcourt in honour of the late Dr. Robert Harcourt. Application not required.
<i>Donor(s):</i> <b>Established by the late Mrs. R. Harcourt in honour of the late Dr. Robert Harcourt</b>
<i>Qualification(s):</i> Students who have completed the 4th or 6th semester levels with an interest in courses in the Department of Land Resource Science.
<i>Amount:</i> 2 awards of \$1,250
<b>Stephanie Wilken Volunteer Award [I0449]</b>
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.
<i>Donor(s):</i> <b>Bev and Darlene Wilken</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>T.K. Warley Agrifood Policy Prize [I0212]</b>
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 not required.
<i>Donor(s):</i> <b>Professor T.K. Warley</b>
<i>Qualification(s):</i> Student providing the best term paper written on a public policy issue relating to the agrifood system or rural society in courses such as AGE*3030 Price and Production Analysis, AGE*4000 Agricultural and Food Policy, and AGE*4720 Special Study in Food Agriculture and Resource Economics.
<i>Amount:</i> 1 award of \$500
<b>The Jack and Lillian MacDonald Scholarship [E0379]</b>
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 persons. Apply by letter to Student Financial Services by April 1.
<i>Donor(s):</i> <b>Jack and Lillian MacDonald</b>
<i>Qualification(s):</i> In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.
<i>Amount:</i> 1 award of \$900
<b>Thomas H. Peters Scholarship [I0233]</b>
Application not required.
<i>Donor(s):</i> <b>Friends and associates of Thomas H. Peters</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$250
<b>Toronto District Beekeeper's Association Scholarship [I0285]</b>
A scholarship is offered by the Toronto District Beekeepers Association in memory of the late Hugh McLeod, past chair of the Association. Application not required.
<i>Donor(s):</i> <b>Mr. Jack Robinson</b>
<i>Qualification(s):</i> The recipient will have good academic standing, have participated in extracurricular activities, and demonstrated a keen interest in beekeeping.
<i>Amount:</i> 1 award of \$500

<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000
<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400
<b>W. Harold Minshall Scholarship [I0451]</b>	
Provided by Dr. W.H. Minshall (O.A.C.'33). Apply to Student Financial Services by April 1.	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation on behalf of Dr. W.H. Minshall</b>
<i>Qualification(s):</i>	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 and aptitude in crop protection, particularly in weed biology and management. 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 on the basis of academic standing in the relevant courses and participation in extra curricular activities.
<i>Amount:</i>	1 award of \$1,000
<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal
<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal
<b>Waterloo-Wellington CA Association Award [I0367]</b>	
Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Waterloo-Wellington Chartered Accountants Association</b>
<i>Qualification(s):</i>	Student who achieves the highest academic standing in the course AGECE*3330, Intermediate Accounting.
<i>Amount:</i>	1 award of \$100
<b>William A. Brechin Scholarship [I0574]</b>	
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 April 1 to the O.A.C. Awards Office by letter of not more than two pages.	
<i>Donor(s):</i>	<b>Maryon Brechin</b>
<i>Qualification(s):</i>	Any student registered in a major offered by the Department of Land Resource Science who has completed a minimum 15.0 course credits.
<i>Amount:</i>	1 award of \$1,000

<b>William Furlong Scholarship in Microeconomics [I0582]</b>	
The Department of Economics offers these scholarships in honour of Professor William Furlong, a long-term member of the Department of Economics and a leader in the scholarship of teaching principles of microeconomics, to the three students with the highest final grades in Introductory Microeconomics (ECON*1050) in the fall semester. Application not required.	
<i>Donor(s):</i>	<b>Colleagues &amp; Friends of Dr. William Furlong</b>
<i>Qualification(s):</i>	Full-time students enrolled in Introductory Microeconomics (ECON*1050)
<i>Amount:</i>	3 awards of \$200

### In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000
<b>C.P.E.S. Dean's Scholarship - ACCESS [I4527]</b>	
Established by a number of industrial, commercial and public sector corporations, 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. Awarded in the Winter semester. This award may be held once only. ACCESS AWARD	
<i>Donor(s):</i>	<b>Established by a number of industrial, commercial and public sector corporations</b>
<i>Qualification(s):</i>	Students with demonstrated financial need registered in any major program in C.P.E.S. in, or beyond, second year. A minimum 80% cumulative average is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$750
<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Earl B. MacNaughton C.P.E.S. ACCESS Scholarships [I4172]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students currently registered in the final year of an honours program in the College of Physical and Engineering Science 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).
<i>Amount:</i>	2 awards of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** The Family of Eleanor & Bill Archibald

**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 \$1,000

**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 April 1 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):** A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.

**Amount:** 1 award of \$2,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Euclid-Hitachi of Canada Ltd.

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Harvey Graham O.A.C. '39

**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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

**Donor(s):** Alumni and friends of the University of Guelph

**Qualification(s):** Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

**Amount:** 2 awards of \$1,250

**Kathleen and R. Douglas Kennedy Scholarship in CSAHS [I0546]**

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.).

**Donor(s):** Mrs. Kathleen Kennedy and the late Mr. R. Douglas Kennedy

**Qualification(s):** This scholarship will be awarded to a student in CSAHS with high academic achievement. Preference will be given to students registered in the Department of Family Relations and Applied Nutrition, the School of Hospitality and Tourism Management, or the Department of Marketing and Consumer Studies and to students with demonstrated financial need.

**Amount:** 1 award of \$1,000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** O.A.C. '52

**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:** 2 awards of \$2,500

**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.).

**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 \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

**Donor(s):** The Giuliani Family

**Qualification(s):** Most academically promising applicant with a demonstrated disability and having financial need.

**Amount:** 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

**Donor(s):** University of Guelph Retirees Association (U.G.R.A.)

**Qualification(s):** Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

**Amount:** 1 award of \$1,000

**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. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) ACCESS AWARD

**Donor(s):** Doug MacDougald, D.V.M.

**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:** 2 awards of \$1,000

**Wellington Laboratories Scholarship [I4308]**

Wellington Laboratories, with the assistance of the Ontario government's OSOTF program, established this award through an endowment provided by Mr. Brock Chittim of Wellington Laboratories. Highly qualified students will be notified by the Chair of the Department of Chemistry and the Department Awards Committee to complete a Financial Need Assessment Form (N.A.F.) and submit to Student Financial Services by February 1. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Mr. Brock Chittim of Wellington Laboratories**

*Qualification(s):* Students that have completed a minimum of 15.0 course credits of an honours major program offered by the Department of Chemistry. Student with demonstrated financial need and the highest cumulative averages in at least three 3000 level chemistry courses taken in semesters 5 or 6. 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

**William & Nona Heaslip Scholarship [I0589]**

Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The William and Nona Heaslip Foundation**

*Qualification(s):* Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.

*Amount:* 2 awards of \$15,000

**Yeandle Family In-Course 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. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). Awards will be made on the basis of financial need and academic achievement. ACCESS AWARD

*Donor(s):* **The Estate of Audrey Yeandle**

*Qualification(s):* Full-time undergraduate students registered in each of the eight academic units and CIDS within the College of Social and Applied Human Sciences. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards). Awards will be made on the basis of financial need and academic achievement.

*Amount:* Several awards up to \$2,000

**In-course Awards with Financial Need****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 7 to Student Financial Services. Two awards of \$500 (one in each of the two colleges).

*Donor(s):* **Archie and Isabelle (Cook) Rintoul**

*Qualification(s):* Students enrolled in the B.A.Sc. program or the Hotel and Food Administration, Housing and Real Estate Management or Marketing Management majors of the B.COMM. program and the department of Environmental Biology in the B.Sc., B.Sc.(Agr.) or the B.Sc.(Env.) degree programs. Students who have completed semester 4 (10.00 credits) and who have demonstrated financial need are eligible.

*Amount:* 2 awards of \$500

**Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

*Donor(s):* **University of Guelph**

*Qualification(s):* Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

*Amount:* 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Families of Cathy and Brian Berg**

*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 \$500

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of '72: 25th Reunion**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1933 (in honour of the late Prof. W.J. Squirrel)**

*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:* 3 awards of \$500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of 1936**

*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:* 2 awards of \$500

**Credit Valley Conservation Authority Foundation Bursary [I3007]**

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

**Donor(s):** Credit Valley Conservation Authority Foundation

**Qualification(s):** Full-time student registered in B.A. Geography, B.Sc. Geographic Information Systems and Environmental Analysis, B.Sc. Engineering (Water Resource Engineering), B.Sc.(Agr.) Agroecosystem Management or B.Sc.(Env.) Geography majors with demonstrated financial need. Preference will be given to a student who resides in a member municipality of the Credit Valley Authority Foundation.

**Amount:** 1 award of \$500

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Mrs Deborah Leach-Sartor

**Qualification(s):** O.A.C. undergraduate degree or diploma student who is physically disabled as determined by the Centre for students with Disabilities, has satisfactory academic standing and 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:** 1 award of \$1,000

**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. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD. A number of awards ranging from \$500 to \$2,000.

**Donor(s):** The estate of Dr. Donald P. Watson

**Qualification(s):** Undergraduate students majoring in Horticultural Science, Landscape Architecture, Agronomy, Agricultural Science or Environmental Science, who have completed a minimum of 10.00 credits and who have demonstrated financial need. Recipients must have satisfactory academic standing in their last 10.00 credits. The scholarships will be awarded based on 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

**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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

**Donor(s):** Mrs. Elizabeth Burton

**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 up to \$2000

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Established by the Miles Family

**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 \$1,500

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Gryphon Investment Council Inc.

**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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

**Amount:** Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s):** Undergraduate Students

**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 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. Awarded in the Winter semester.

**Donor(s):** Mr. T.K.C. Karr, O.A.C. '32

**Qualification(s):** O.A.C. students with demonstrated financial need

**Amount:** Several varies

**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.

**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. Awarded in the Winter semester. 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

<b>International Emergency Medical Aid Assistance [I3059]</b>	
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.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several awards of varying amounts
<b>International Student Bursaries [I3009]</b>	
Mrs. Norma L. Valeriote has made available a number of bursaries. Apply to the International Student Advisor.	
<i>Donor(s):</i>	<b>Mrs. Norma L. Valeriote</b>
<i>Qualification(s):</i>	Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.
<i>Amount:</i>	Several of varying amounts
<b>Irvine and Grace Black Memorial Bursary [I3051]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Family and friends of Irvine and Grace B.L.A.ck</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>Leroux Bursaries [I3535]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mr. J.H. Leroux</b>
<i>Qualification(s):</i>	O.A.C. degree students in the B.Sc.(Agr.), B.Sc., B.Comm. or B.Sc.Env.) programs with demonstrated financial need. Satisfactory academic standing is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	4 awards of \$1,000
<b>Mary I. Whitelock Bursaries [I3524]</b>	
Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Estate of Mary I. Whitelock</b>
<i>Qualification(s):</i>	All undergraduate, graduate or O.A.C. diploma students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	13 awards of \$2,000

<b>O.A.C. '38 Lloyd Minshall Bursaries [I3529]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. '38 Alumni</b>
<i>Qualification(s):</i>	O.A.C. undergraduate students with demonstrated financial need in semesters 5, 6, 7 or 8 and O.A.C. graduate students are eligible to apply. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	7 awards of \$1,000
<b>O.A.C. '55 Access Bursaries [I3517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD.	
<i>Donor(s):</i>	<b>O.A.C. Class of '55</b>
<i>Qualification(s):</i>	Students at any semester level in an O.A.C. degree program or students enrolled in the B.Sc.(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).
<i>Amount:</i>	Several awards of \$500
<b>O.A.C. '57 Bursaries [I3518]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. '57 and the O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	5 awards of \$1,000
<b>O.A.C. Alumni Foundation Access Bursaries [I3533]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. Alumni Foundation</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	4 awards of \$500
<b>Ontario Co-operatives R.P. Forshaw Bursary [I3013]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The Co-operatives, Credit Unions, friends and associates of Prof. R.P. Forshaw</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$400
<b>Ontario Federation of Agriculture Bursaries [I3520]</b>	
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 and a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Ontario Federation of Agriculture</b>
<i>Qualification(s):</i>	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. A student may receive up to three bursaries annually (\$1,500). Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	12 awards of \$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. Awarded in the Winter semester.

*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]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

*Donor(s):* **Office of Registrarial Services**

*Qualification(s):* Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

*Amount:* Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

*Donor(s):* **Family and Friends of Ron Scriver**

*Qualification(s):* Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Scotiabank**

*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

**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 stating qualifications with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **O.A.C. Alumni Association**

*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:* 3 awards of \$500

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

*Donor(s):* **Alumni and Friend of the University of Guelph**

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **University of Guelph Alumni Association**

*Qualification(s):* Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

*Donor(s):* **University of Guelph**

*Qualification(s):* Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

*Amount:* Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

*Donor(s):* **University of Guelph**

*Qualification(s):* Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

*Amount:* Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

*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 and a minimum of 2.0 course credits completed.

*Amount:* Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

*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 and a minimum of 2.0 course credits completed.

*Amount:* Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

*Donor(s):* **The University Police**

*Qualification(s):* Full-time undergraduate and graduate students who have financial need.

*Amount:* Several of various amounts

**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. Typically, awarded in the Winter semester.

*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

**In-course Travel Grants****A.W. Archibald Memorial Travel Grant [T4541]**

Mr. A.W. Archibald, O.A.C. '33 with the assistance of the Ontario government's OSOTF program, provide these travel grants to students who plan to travel for a semester abroad or to attend other schools outside of Canada for workshops or other academic related purposes. Apply to Student Financial Services with a letter outlining proposed travel plans and academic purpose accompanied by a letter of support from a faculty member or student advisor, a travel budget, and a completed Financial Need Assessment Form (N.A.F.) by October 7. ACCESS AWARD.

*Donor(s):* **A.W. Archibald, O.A.C. '33**

*Qualification(s):* Undergraduate students in any O.A.C. 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 up to \$1000

**Aeroplan International Travel Grant [T0604]**

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

*Donor(s):* **Aeroplan**

*Qualification(s):* Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

*Amount:* 1 plane ticket per each semester

**Arthur D. Latonnell Undergraduate Travel Grants [T0058]**

An endowment fund established in memory of Arthur D. Latonnell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

*Donor(s):* **The Estate of Arthur D. Latonnell**

*Qualification(s):* Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

*Amount:* several up to a maximum of \$1000

**Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]**

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

*Donor(s):* **Canadian Friends of the Hebrew University in Jerusalem**

*Qualification(s):* Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 3 Awards with varying amounts

**D & G Hart Travel Grant [T0601]**

Douglas H., O.A.C. 1922, and George M., O.A.C. 1927, were long time supports of O.A.C. and believed greatly in the benefits that travel provided to an individual's personal and professional growth. Apply to the O.A.C. Awards Office by April 1 with a letter of no more than two pages, outlining the intended study program/conference/or other type of travel opportunity, the reasons for choosing the travel program and the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. This award cannot be held with any other University of Guelph Travel Grant.

*Donor(s):* **Family of Douglas and George Hart**

*Qualification(s):* Students currently enrolled in any O.A.C. program with a minimum 70% cumulative average who intend to participate in travel related to course study.

*Amount:* 1 award of up to awards of \$1,000

**H.C. Mason Travel Scholarships [T0598]**

In memory of the late H.C. Mason, a travel fund, within the O.A.C. Teaching Trust, for O.A.C. students has been established by F.W. Bray of Hamilton. Apply to the O.A.C. Awards Office by April 1, no more than two semesters prior to the commencement of the travel program, with the submission of a letter of no more than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.

*Donor(s):* **Mr. F.W. Bray**

*Qualification(s):* Student who are currently registered in an Ontario Agricultural College undergraduate program with a minimum of 70% cumulative average who intend to participate in travel related to course study

*Amount:* various awards up to \$1,500

**J. Ross Cavers Study Abroad Scholarship [T0051]**

O.A.C. '53 provides these scholarships in memory of J. Ross Cavers, their honorary year member, professor emeritus, and respected poultry scientist. Apply by letter outlining the intended semester abroad program, the reasons for choosing the program and the perceived value of participation along with a brief summary of related and extracurricular activities to the O.A.C. Awards Office by April 1. A letter of recommendation will also be considered as part of the application package. Application should be made a maximum of two semesters prior to participation in the intended travel program.

*Donor(s):* **Class of O.A.C. '53**

*Qualification(s):* Undergraduate student in O.A.C. planning to participate in a semester abroad program with a minimum 75% cumulative average. Preference will be given to a candidate who has exhibited qualities of leadership.

*Amount:* 3 awards of \$1,800

**J.D. Cunningham Travel Grant [T0605]**

Established on honour of the J.D. Cunningham, a professor of microbiology at the University of Guelph. Apply by April 1 to the O.A.C. Awards Office with a letter of no more than two pages outlining the intended study program, conference, or other type of learning opportunity. Include the reason for choosing the program and describe the anticipated benefits of participation. Letters of recommendation will be considered as part of the application package. Upon return from the travel opportunity, the student must be willing to present a report to classmates and/or faculty and/or the Ontario Food Protection Association.

*Donor(s):* **Ontario Food Protection Association**

*Qualification(s):* Students currently enrolled in any O.A.C. program with a minimum cumulative average of 75%. Preference will be given to students in Food Science specializing in Microbiology.

*Amount:* 1 award of \$2,000

<b>Massey Fund Travel Scholarships [T0417]</b>	
Travel scholarships available from the Massey Fund. Not tenable with other awards that support travel costs. Apply by letter outlining the study abroad/exchange program and travel costs to the O.A.C. Dean's Office by April 15.	
<i>Donor(s):</i>	<b>O.A.C. Awards Committee</b>
<i>Qualification(s):</i>	O.A.C. undergraduate students who are participating in an approved study abroad or exchange program outside Canada. Academic standing in the last two full-time semesters or equivalent will be used to determine recipients.
<i>Amount:</i>	1 award of \$750

<b>O.A.C. '05 Excellence Travel Grant [T0060]</b>	
In honour of the O.A.C. Class of 1905 and with the support of the O.A.C. Class of 2005. Apply to the O.A.C. Awards Office by April 1 with the submission of a letter of no longer than two pages outlining the intended study program/conference/or other type of learning opportunity, reasons for choosing the program and the anticipated benefits of participation. A letter of recommendation will be considered as part of the application package. This grant is not tenable with other University of Guelph travel grants.	
<i>Donor(s):</i>	<b>Class of OAC 1905 and the Class of OAC 2005</b>
<i>Qualification(s):</i>	Student who are currently registered in an Ontario Agricultural College undergraduate degree program and wish to travel to expand their educational opportunities.
<i>Amount:</i>	1 award of \$300

<b>O.A.C. '47 Travel Bursaries [T3505]</b>	
Provided by O.A.C.'47 on the occasion of its 50th anniversary and with the assistance of the Ontario government's OSOTF program. Apply by letter with a completed Travel Award Application and a Financial Need Assessment Form (N.A.F.) for Travel awards to Student Financial Services by October 1, February 1 or June 1. ACCESS AWARD	
<i>Donor(s):</i>	<b>O.A.C. '47</b>
<i>Qualification(s):</i>	O.A.C. undergraduate students who have demonstrated financial need and who are participating in a study abroad program for academic credit at an approved institution. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	3 awards of \$600

<b>O.A.C. '54 International Study Scholarship [T0586]</b>	
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 April 1, no more than two semesters prior to the commencement of the program.	
<i>Donor(s):</i>	<b>Class of O.A.C. '54</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	2 awards of \$1,450

<b>Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]</b>	
The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.	
<i>Donor(s):</i>	<b>The Estate of Richard Hungerford</b>
<i>Qualification(s):</i>	Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	Several awards of varying amounts to a maximum of \$1,000

<b>Robb Travel Grants [T3028]</b>	
These travel grants have been provided in recognition of her love of agriculture, by the estate of Martha Robb, Paris, Ontario. Apply to the Dean, O.A.C. by April 15. Varying amounts (80% of the travel costs will be covered up to \$750 per student).	
<i>Donor(s):</i>	<b>The estate of Martha Robb</b>
<i>Qualification(s):</i>	O.A.C. students who are attending another university on a Letter of Permission.
<i>Amount:</i>	Several varies

<b>Roderick Long International Travel Grant [T0360]</b>	
Offered in memory of the late Roderick Long, O.A.C.'54. Up to eighty percent of the travel costs associate with the study outside of Canada program will be covered up to a maximum of \$1,000 per student. Application by letter should be made to the Dean O.A.C. by April 15, and include a description of the study abroad program. Travel grant (or grants) totalling \$1,500.	
<i>Donor(s):</i>	<b>Mr. Roderick W. Long</b>
<i>Qualification(s):</i>	O.A.C. undergraduate student who is studying outside of Canada on an approved program for one or more semesters
<i>Amount:</i>	Several awards of \$1,500

<b>University of Guelph Travel Scholarships [T0421]</b>	
The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.
<i>Amount:</i>	Several up to \$1,000

## 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

<b>Angelo and Frank Agro Undergraduate Scholarship [E0520]</b>	
This \$7,000 (\$1,750 annually for four years) scholarship is provided by the Agro Scholarship Fund. Apply by April 1 to Student Financial Services, including a covering letter describing your past activities within 4H and a letter from a 4H club official describing your past activities with the organization. The scholarship will be awarded to the eligible student 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.	
<i>Donor(s):</i>	<b>The Frank Agro Estate</b>
<i>Qualification(s):</i>	Full-time students entering semester 1 who have attained a minimum 75% admission average and completion of a minimum of 10 4H projects.
<i>Amount:</i>	3 awards of \$7,000
<b>Board of Governors' Scholarships [E0317]</b>	
The scholarship will be paid in eight equal installments with the first and second payments payable shortly after registration in semesters 1 and 2. The 3rd to 8th payments are contingent upon obtaining a minimum average of 80% over the previous two semesters of full-time study. Students who fail to qualify for a payment may re-qualify by subsequently obtaining an 80% or better average over the previous two semesters of full-time study. Application not required. Twenty-five awards of \$8,000 (\$2,000 annually for 4 years).	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Outstanding students entering semester 1
<i>Amount:</i>	25 awards of \$8,000
<b>December 6th Memorial Scholarship [E0005]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>University of Guelph Faculty Association</b>
<i>Qualification(s):</i>	Female student who is a Canadian Citizen or Permanent resident of Canada enrolled in the College of Physical and Engineering Science. 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. Demonstrated financial need may also be considered.
<i>Amount:</i>	1 2250 (\$750 in each of semesters 1, 3 and 5).
<b>Dr. Jack Britney Scholarship [E0034]</b>	
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 to a graduate student from any of the O.A.C. Diploma programs offered at any of the University of Guelph campuses that enters a degree program at the University of Guelph. Apply by letter, by April 1 to the O.A.C. Awards Office on the main campus.	
<i>Donor(s):</i>	<b>Friends and Associates</b>
<i>Qualification(s):</i>	Graduate students from a University of Guelph Diploma program with high academic achievement and entering a degree program at the University of Guelph. Preference will be given to Graduates of the Diploma in Agriculture program.
<i>Amount:</i>	1 award of \$1,200
<b>Earl B. MacNaughton Entrance Scholarships [E0172]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students with high academic standing, entering an honours program in the College of Physical and Engineering Science. Emphasis will be given to academic achievement in high school science and mathematics.
<i>Amount:</i>	4 awards of \$1,000

<b>Gordon W. Innes Scholarship [E0140]</b>	
Application not required.	
<i>Donor(s):</i>	<b>Gordon W. 'Sparky' Innes Scholarship Fund Committee of the Woodstock Agricultural Society.</b>
<i>Qualification(s):</i>	Student from Oxford County with the highest admission average.
<i>Amount:</i>	1 award of \$1,400
<b>Honours Physics Scholarship [E0132]</b>	
Offered by the Department of Physics, these awards will be made based on the student's admission average. A minimum 85% admission average is required to be considered. Application not required.	
<i>Donor(s):</i>	<b>Department of Physics</b>
<i>Qualification(s):</i>	Students entering the first semester level of the B.Sc. program or the B.Sc. (Tech.) program with high academic standing 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.
<i>Amount:</i>	Several awards of \$4,000
<b>International Student Entrance Scholarships [E0408]</b>	
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 not required.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	Several awards ranging in value from \$500 - \$6,000
<b>J.D. MacLachlan Scholarship [E0170]</b>	
Provided by the family of J.D. MacLachlan. Application not required.	
<i>Donor(s):</i>	<b>The J.D. MacLachlan Trust</b>
<i>Qualification(s):</i>	Student entering the University with the highest admission average.
<i>Amount:</i>	1 award of \$1,500
<b>Lincoln Alexander Chancellor's Scholarship [E0493]</b>	
These scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend) were established in honour Lincoln Alexander, Chancellor of the University of Guelph and former Lieutenant Governor of Ontario, on his 80th birthday. They are intended to enhance student diversity and are amongst the most prestigious entrance awards at the University of Guelph. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate one student who cannot be the President's Scholarship nominee. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.	
<i>Donor(s):</i>	<b>Many Donors</b>
<i>Qualification(s):</i>	Entering students of academic distinction who are Aboriginal, persons with a disability or members of a racial minority, and who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society. Financial need may be taken into consideration.
<i>Amount:</i>	2 awards of \$26,000
<b>McArthur-Humphries Scholarship [E0183]</b>	
Provided by the Wilhelmina McArthur-Humphries Trust Fund. This scholarship is awarded to students entering any undergraduate degree program and are based on the highest admission average. Application not required.	
<i>Donor(s):</i>	<b>Wilhelmina McArthur-Humphries Trust Fund</b>
<i>Qualification(s):</i>	Students entering semester 1 with a minimum 75% admission average. Preference will be given to those students from Lanark and Wellington Counties. 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.
<i>Amount:</i>	12 awards of \$1,000

**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 letter outlining extracurricular and/or community activities, ensuring that you have completed a Financial Need Assessment Form (N.A.F.) for Entrance Awards, and submit to Student Financial Services by April 1. Students who have applied to the University for admission will receive information on completing a Financial Need Assessment Form (N.A.F.) for Entrance Awards from the University early in the calendar year. This award is not tenable with the President's or Lincoln Alexander Chancellor's Scholarship. Annual payments are contingent upon full-time enrolment and maintaining a minimum 70% average on the previous Fall and Winter semesters. One award of \$12,000 (\$3,000 annually for 4 years).

**Donor(s):** Paul and Aileen Clarke

**Qualification(s):** Students with a minimum 80% average with a record of leadership and community participation are eligible. Preference will be given to candidates from Blenheim district or Kent County and who were raised, or have worked, on a farm. Students may be contacted to provide special need circumstances if there is a short list of equal candidates.

**Amount:** 1 award of \$12,000

**President's Scholarship [E0238]**

The most prestigious entrance awards at the University of Guelph. Twelve scholarships of \$26,000 (\$6,500 annually) plus the opportunity for a summer research assistantship after the first year of study (approximately \$6,000 stipend), named to honour their donors or distinguished members of the University. Students cannot apply directly for this award. Nominations must be made by each high school. Each high school can nominate two students; one entering a science program and one entering an arts/social science/humanities program. The nomination process is a two-part process: (a) the school's nomination and (b) the student's supporting documentation. This is outlined in the material sent to each high school in Canada from the University of Guelph each fall. High schools must submit the complete application (both parts) directly to the Associate Registrar, Student Financial Services by Feb. 1.

**Donor(s):** A number of President's Scholarships have been named in honour of the following people and/or donors:

**Dick Brown**

Two of the scholarships, endowed by Dr. Patrick Lett are awarded to winners whose leadership qualities best reflect those demonstrated by Dick Brown in University Athletics from 1968 to 1988.

**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):** Entering students of academic distinction who have made significant contributions to their schools and communities and demonstrated the potential to become leaders in society.

**Amount:** 12 awards of \$26,000

**The 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**University of Guelph Entrance Scholarships [E0291]**

This scholarship is based on the final admission average and program of study that is calculated by Admission Services, based on 12U, 12M, or O.A.C. courses. These will be awarded based on the final high school grades that are submitted to the University in July. A minimum 85% final admission average guarantees an award. The scholarship will be applied directly to the student's financial account in two equal payments in the Fall and Winter Semesters. You can view the scholarship amounts at: [http://www.uoguelph.ca/studfin/fall\\_current\\_merit.shtml](http://www.uoguelph.ca/studfin/fall_current_merit.shtml). Application not required.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering their first year of post-secondary studies for the first time and have a minimum 85% final admission average.

**Amount:** Several awards ranging in value from \$1,500 to \$3,000

**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. Application not required.

**Donor(s):** University of Guelph Faculty Association

**Qualification(s):** Student entering an undergraduate degree program at the University of Guelph with the highest admission average who has been a resident in the County of Wellington during the previous twelve months.

**Amount:** 1 award of \$2,250

**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 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 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 \$550

**Entrance Scholarships with Financial Need****Bill Klopp Memorial Award [E0150]**

Priority will be given to a student from Kitchener-Waterloo Collegiate and Vocational Institute. Apply by letter, to Student Financial Services, outlining extracurricular activities and by completing the online Financial Need Assessment Form (N.A.F.) by May 1. Students should complete the 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).

**Donor(s):** Ross and Mary Lou Klopp

**Qualification(s):** Presented to a student entering semester 1 from the cities of Kitchener or Waterloo who has demonstrated involvement in extracurricular activities who has shown satisfactory academic performance and who has financial need.

**Amount:** 1 award of \$500

**Registrar's Entrance Scholarships [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 (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 May 1. Scholarship offers will be made in May. This award is not tenable with the University of Guelph Accessibility Scholarship, but can be held with all other Entrance Awards.

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic merit.

**Amount:** 500 awards of \$2,000

**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 (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 May 1. ACCESS AWARD

**Donor(s):** Rol-Land Farms

**Qualification(s):** Outstanding entering undergraduate degree students 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

**University of Guelph Accessibility Scholarship [E3038]**

Established by the University of Guelph to support entering undergraduate students with identified 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). Deadline to submit the application is May 1. Scholarship offers will be made in May. This award is not tenable with the Registrar's Entrance Scholarship, but can be held with all other Entrance Awards. Approximately 150 awards of \$9,000 (\$3,000 in year one and \$2,000 in years 2, 3 and 4).

**Donor(s):** University of Guelph

**Qualification(s):** Students entering a full-time undergraduate program on the basis of financial need and academic excellence.

**Amount:** 150 awards of \$9,000

**Entrance Awards with Financial Need****Harvey Graham Bursary [E3030]**

Provided by Harvey Graham (O.A.C. '39). 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). Deadline to submit the application is May 1.

**Donor(s):** Harvey Graham, O.A.C. '39

**Qualification(s):** Student who has demonstrated financial need with preference given to a student who comes from a working farm. Students graduating from Lindsay C. V. I., Fenelon Falls Secondary School, or I. E. Weldon Secondary School will be considered. Each application must be accompanied by a reference letter from the Reeve of the student's home township.

**Amount:** 1 award of \$1,700

**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. Students who have applied to the University of Guelph will receive an application form.

**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 of \$1,000, Several awards of \$3,000

**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 recommendation from the County agricultural representative or the secondary school principal is required and should be sent to Student Financial Services by April 1. 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).

**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:** 12 awards of \$500

**In-course Scholarships****Bill Taylor Memorial Scholarship [I0280]**

Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.

**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

**Certified General Accountants Award for Excellence Prize [C0025]**

Awarded to the graduating student with the highest average in the three accounting courses listed. Application not required.

**Donor(s):** Certified General Accountants Association of Ontario

**Qualification(s):** Graduating student who has a minimum cumulative average of 77% in Financial Accounting AGEC\*2220; Management Accounting AGEC\*2230; and Intermediate Accounting AGEC\*3330.

**Amount:** 1 award of \$150, plus 1 year tuition and course fee towards the CGA program. (approximate value of \$2,000)

**CFRU Volunteer Award [I0215]**

Apply to the CFRU Board of Governors by April 30.

**Donor(s):** Station Manager, CFRU

**Qualification(s):** Applicants must be registered or graduating from the University of Guelph and have volunteered at CFRU for at least one year. The recipients will be selected on the basis of academic performance and volunteer work at CFRU.

**Amount:** 2 awards of \$250

**Chemistry Club Prize for Chemistry Promotion [I0495]**

Donated by the Chemistry Club, together with the Dean of C.P.E.S.. Applicants should submit a one-page type-written summary outlining their efforts to promote the disciplines of chemistry within the University, or the community to the Executive of the Chemistry Club by February 1st.

**Donor(s):** The Chemistry Club

**Qualification(s):** Student at any semester level enrolled in a degree program administered by the Department of Chemistry, who has made a significant contribution to promotion of chemistry.

**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 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

<b>College of Physical Engineering Science Academic Scholarship [I0073]</b>	
Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Offered in the Winter semester to students who have completed at least 15.0 course credits in a College of Physical and Engineering Science program and have excellent grades but have not received awards recently.
<i>Amount:</i>	2 awards of \$250
<b>College of Physical Engineering Science Graduation Prize [C0075]</b>	
The winner will be selected in May from all students who have completed the program in the previous twelve months. Application not required. One award of \$250 and a commemorative plaque.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Student graduating with the highest cumulative average from an honours B.Sc. program in a Physical and Engineering Science area.
<i>Amount:</i>	1 award of \$250, 1 Commemorative plaque
<b>College of Physical Engineering Science Scholarship [I0076]</b>	
Awarded in the Fall semester to a student who has completed semester 6 in the previous Fall, Winter or Spring semesters and who is enrolled in Year 4 of a College of Physical and Engineering Science program. Application not required.	
<i>Donor(s):</i>	<b>College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	Recipients will be selected on the basis of a high average (minimum 80% average required) in courses normally taken in Year 3.
<i>Amount:</i>	1 award of \$250
<b>Collins Barrow Award [I0040]</b>	
Offered by Collins Barrow, a national firm of Chartered Accountants. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Collins Barrow Chartered Accountants</b>
<i>Qualification(s):</i>	Student with the highest grade in course AGECE*3330, Intermediate Accounting, in the Fall semester. In the event of a tie, the scholarship will be given to the student with the highest cumulative average in their program.
<i>Amount:</i>	1 award of \$500
<b>Copernicus Scholarship in Physics [I0081]</b>	
Application not required.	
<i>Donor(s):</i>	<b>The faculty members of the Department of Physics through their Scholarship Trust Fund</b>
<i>Qualification(s):</i>	Students who have completed 7.5 course credits and are registered in one of the majors programs in Physics. To be eligible, students must have completed the courses PHYS*2440 and PHYS*2460 with a minimum of an A average. The awards will be made to the students with the highest average in the Physics courses taken in the Year 1 and in PHYS*2440 and PHYS*2460.
<i>Amount:</i>	4 awards of \$500
<b>David F. Boyes Apiculture Scholarship [I0031]</b>	
Established in memory of David Boyes a technician in the Apiculture Field Laboratory. Application not required.	
<i>Donor(s):</i>	<b>The Apiculture Club</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$150
<b>Deans' Scholarships [I0323]</b>	
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i>	150 awards of \$1,000

<b>Dr. Caesar V. Senoff Memorial Scholarship for Excellence in Chemistry [I0517]</b>	
The Senoff family and the College of Physical and Engineering Science, 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. Application not required.	
<i>Donor(s):</i>	<b>Senoff family and the College of Physical and Engineering Science, together with the University of Guelph Faculty Association and friends</b>
<i>Qualification(s):</i>	Student majoring in any Chemistry program who has completed between 7.5 and 9.75 credits and who has the highest cumulative average over 80%.
<i>Amount:</i>	1 award of \$500
<b>E.B. MacNaughton Convocation Prize [C0171]</b>	
Established by the College of Physical and Engineering Science to honour Earl B. MacNaughton, former head of the Department of Physics and founding Dean of the College of Physical Science. Application not required. One award of a plaque-mounted medal and \$250.	
<i>Donor(s):</i>	<b>The College of Physical and Engineering Science</b>
<i>Qualification(s):</i>	The College of Physical and Engineering Science nominee for the Winegard Medal.
<i>Amount:</i>	1 award of \$250, 1 Plaque-mounted medal
<b>Egelstaff Scholarship [I0397]</b>	
In honour of University Professor Emeritus and former Chair of the Department of Physics, Peter A. Egelstaff. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Department of Physics</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$500
<b>Evelyn Matheson Pepper Memorial Scholarship [I0538]</b>	
The daughters and grandchildren of Evelyn Matheson Pepper, a Mac '33 graduate, provide this scholarship. Application not required.	
<i>Donor(s):</i>	<b>Ms. Barbara Stuart and Ms. Susan Pepper</b>
<i>Qualification(s):</i>	Student who achieves the highest grade in the course FRHD*3200, Practicum in Child, Youth and Family I, offered by the department of FRAN.
<i>Amount:</i>	1 award of \$1,000
<b>Floyd Roadhouse Prize in Analytical Chemistry [I0247]</b>	
Presented in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Colleagues, students and friends of Professor F.E.B. Roadhouse</b>
<i>Qualification(s):</i>	Student with the highest grade in CHEM*2400 Analytical Chemistry I in the previous calendar year, who is continuing in an honours major program administered by the Department of Chemistry. In the event of a tie, laboratory performance will be considered.
<i>Amount:</i>	1 award of \$200
<b>George A. Farley Scholarship [I0099]</b>	
Established in memory of George A. Farley, a chemistry graduate of the Class O.A.C.'33, and presented in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>James M. Farley</b>
<i>Qualification(s):</i>	Student enrolled in a Co-op program administered by the Department of Chemistry and who has completed their second work term within the preceding calendar year. Work term reports, work term assessments and course grades will be considered. The student must have a cumulative average of at least 80%.
<i>Amount:</i>	1 award of \$250

**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. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* Mrs. George A. Gray

*Qualification(s):* Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**Governor General's Medal [C0044]**

Established by the Office of the Governor General of Canada. Application 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:* 1 Silver medal

**Guelph Soap Company Scholarship [I0288]**

The Guelph Soap Company donates this scholarship towards tuition fees, which is awarded in the Winter semester. Application not required.

*Donor(s):* Tricorp Chemical Specialties

*Qualification(s):* Student enrolled in the organic chemistry courses CHEM\*3750 and CHEM\*3760 during the previous calendar year who has obtained the highest average in one Biochemistry course and two Organic Chemistry courses, and who is continuing in an honours major program administered by the Department of Chemistry.

*Amount:* 1 award of \$1,200

**Honours Applied Pharmaceutical Chemistry Scholarship [I0454]**

This scholarship is donated by the faculty of the Department of Chemistry through their scholarship trust fund and is awarded annually in the Winter semester. Application not required.

*Donor(s):* Donated by the faculty of the Department of Chemistry through their scholarship trust fund

*Qualification(s):* Student enrolled in the B.Sc.(Tech.) honours major Applied Pharmaceutical Chemistry program who completed Year's 2 course requirements in the previous calendar year, and has achieved the highest cumulative average, providing that at least 3.00 credits offered by the Department have been taken.

*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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.

*Donor(s):* International Student Organization (ISO)

*Qualification(s):* Full-time International 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 75%, and is registered at the time of application.

*Amount:* 1 award of \$1,000

**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 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 Medal

**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 Physical and Engineering Science from 1987 to 1995. Application 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 \$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 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 \$1,500

**John Eccles Scholarship [I0093]**

Nominations, accompanied by appropriate resumes, are to be submitted to Student Financial Services by April 1.

*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 \$600

**Kenneth W. Hammond Award [I0045]**

The evaluation of the student will be based on the final essay in the "Environmental Perspectives and Human Choice: 5000 Days" course. The selection committee will be comprised of 4 persons: the donor, the Director of the Arboretum, the Dean of Physical and Engineering Science and the Dean of Biological Science. Application not required.

*Donor(s):* Kenneth W. Hammond

*Qualification(s):* Student who has best demonstrated an understanding of the world's resource situation and its proper use by humankind.

*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 the end of the 12th week of the Winter semester.

*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

**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. Application not required.

**Donor(s):** Professor Gordon L. Lange, Professor Joe M. Prokipcak and friends and colleagues

**Qualification(s):** Student in C.P.E.S. with the highest average grade in CHEM\*1040,1050 and 2700 who 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.

**Donor(s):** Students, staff, faculty and friends of Dr. Leonard Connolly

**Qualification(s):** Full-time visiting exchange undergraduate or graduate 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). 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.

**Amount:** 1 award of \$1,000

**MacKenzie Scholarship [I0398]**

In honour of University Professor Emeritus Innes K. MacKenzie. Not tenable with the Egelstaff Scholarship. Application 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 \$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. Awarded in the Winter semester. Application 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 \$500

**Marion McKenzie Prizes 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\*1010, HIST\*2450, HIST\*2602). Application not required.

**Donor(s):** TBA

**Qualification(s):** The recipient for HIST\*1010 must have completed no more than 5.0 credits; the recipient for HIST\*2450, no more than 10.0 credits and be in the history program; and the recipient for HIST\*2602, no more than 10.0 credits.

**Amount:** 3 awards of \$250

**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

**R.C. Moffatt Memorial Scholarship in Physics [I0535]**

This scholarship is awarded in the winter semester to the student with the highest cumulative average over 80%. This award is not tenable with any other Department of Physics scholarships. Application 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 \$900

**Society of Chemical Industries Prizes in Chemistry/Applied Pharmaceutical Chemistry [C0333]**

Application not required.

**Donor(s):** Society of Chemical Industry

**Qualification(s):** Students who obtain the highest standing in the final year in each of the B.Sc. honours major Chemistry and the B.Sc.(Tech.) honours major Applied Pharmaceutical Chemistry.

**Amount:** 2 Engraved plaques

**Stephanie Wilken Volunteer Award [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 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 persons. Apply by letter to Student Financial Services by April 1.

**Donor(s):** Jack and Lillian MacDonald

**Qualification(s):** In the first instance, the award will be given to an entering student coming from the Grand River Polytechnical Institute (GRPI) and who has received the highest cumulative average in the Native University Access 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 GRPI who has the highest cumulative average at the University.

**Amount:** 1 award of \$900

**Thomas H. Peters Scholarship [I0233]**

Application 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 \$250

**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 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.

**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. 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, provided that a minimum of 70% standing is obtained.

**Amount:** 1 award of \$1,000

<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400

<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal

<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal

<b>Waterloo-Wellington CA Association Award [I0367]</b>	
Provided by the Waterloo-Wellington Chartered Accountant's Association. Awarded in the Winter semester. Application not required.	
<i>Donor(s):</i>	<b>Waterloo-Wellington Chartered Accountants Association</b>
<i>Qualification(s):</i>	Student who achieves the highest academic standing in the course AGE*3330, Intermediate Accounting.
<i>Amount:</i>	1 award of \$100

### In-course Scholarships with Financial Need

<b>3M Canada Scholarships [I0564]</b>	
Provided by 3M Canada. Apply to Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.).	
<i>Donor(s):</i>	<b>3M Canada Company</b>
<i>Qualification(s):</i>	Students entering Year 4 (ie. having completed a minimum of 15.0 credits) with demonstrated financial need and high academic achievement.
<i>Amount:</i>	2 awards of \$1,000

<b>C.P.E.S. Dean's Scholarship - ACCESS [I4527]</b>	
Established by a number of industrial, commercial and public sector corporations, 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. Awarded in the Winter semester. This award may be held once only. ACCESS AWARD	
<i>Donor(s):</i>	<b>Established by a number of industrial, commercial and public sector corporations</b>
<i>Qualification(s):</i>	Students with demonstrated financial need registered in any major program in C.P.E.S. in, or beyond, second year. A minimum 80% cumulative average is required. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	1 award of \$750

<b>City of Guelph 175th Anniversary Awards [I0515]</b>	
Provided by the Guelph Community Foundation, in celebration of the 175th anniversary of the City of Guelph in 2002, as an investment for future generations. Apply to Student Financial Services, by October 7 of the second year of study, with a letter describing Guelph community and University community volunteer activities and extracurricular activities, a completed Financial Need Assessment Form (N.A.F.), and two reference letters not to exceed two pages in length from individuals familiar with the volunteer and/or community service contributions. Award may be held only once.	
<i>Donor(s):</i>	<b>The Guelph Community Foundation</b>
<i>Qualification(s):</i>	Undergraduate degree students with more than 5.0 credits and less than 10.5 credits of full-time study must have maintained a cumulative 70% average in all courses completed (5.0 credits or more) in the first year study and have demonstrated leadership 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. Selection will include equally weighted consideration of academic performance, leadership both on and off campus and financial need.
<i>Amount:</i>	1 award of \$1,000

<b>Earl B. MacNaughton C.P.E.S. ACCESS Scholarships [I4172]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Earl B. MacNaughton</b>
<i>Qualification(s):</i>	Students currently registered in the final year of an honours program in the College of Physical and Engineering Science 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).
<i>Amount:</i>	2 awards of \$1,000

<b>Eleanor Morgan &amp; Bill Archibald Scholarships [I4540]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Family of Eleanor &amp; Bill Archibald</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,000

<b>Erin Demers Memorial Scholarship [I0406]</b>	
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 April 1 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.	
<i>Donor(s):</i>	<b>Family and friends of Erin Katrina Demers</b>
<i>Qualification(s):</i>	A student who has resided in an on-campus residence during the first semester and who has a minimum cumulative average of 70%. This award is payable in the second year (ie. completed 5.0 course credits) of study. Preference will be given to students with demonstrated financial need and who have participated significantly in extracurricular activities.
<i>Amount:</i>	1 award of \$2,000

<b>Euclid-Hitachi Scholarships [I4517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Euclid-Hitachi of Canada Ltd.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Graham Family Incentive Scholarship [I4506]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Harvey Graham O.A.C. '39</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$5,000
<b>Graham, Fraser and Trevor Bosch Scholarships in Chemistry [I4288]</b>	
Established by Mr. Martin Bosch of the Guelph Soap Company, with the assistance of the Ontario government's OSOTF program. Students with high academic standing registered in Year 3 (minimum of 10.00 - 14.75 credits) or Year 4 (at least 15.00 credits) of studies will be notified by the Awards Committee and Chair of the Department of Chemistry and advised to complete a Financial Need Assessment Form (N.A.F.) in Student Financial Services by February 1st. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mr. Martin Bosch of the Guelph Soap Company</b>
<i>Qualification(s):</i>	Outstanding undergraduate students in the B.Sc. Chemistry major, or in the B.Sc.(Tech.) Applied Pharmaceutical Chemistry program, who have demonstrated financial need. Of the recipients with demonstrated financial need and 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 3000 level chemistry courses taken in Year 3. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,500
<b>Guelph Varsity Athletic Accessibility Scholarship [I0518]</b>	
Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.	
<i>Donor(s):</i>	<b>Alumni and friends of the University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.
<i>Amount:</i>	2 awards of \$1,250
<b>MacNaughton ACCESS Scholarship in Physics [I4523]</b>	
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. Students may hold this award more than once. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Earl B. MacNaughton and faculty, staff and alumni of the Department of Physics</b>
<i>Qualification(s):</i>	Students with demonstrated financial need who are in second year or beyond of a major physics program with a minimum cumulative average of 70% in the required physics courses of that program. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	4 awards of \$1,000
<b>Tara Lynn Giuliani Memorial Award [I0375]</b>	
In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.	
<i>Donor(s):</i>	<b>The Giuliani Family</b>
<i>Qualification(s):</i>	Most academically promising applicant with a demonstrated disability and having financial need.
<i>Amount:</i>	1 award of \$500

<b>University of Guelph Retiree Association Degree Scholarship [I0569]</b>	
This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.	
<i>Donor(s):</i>	<b>University of Guelph Retirees Association (U.G.R.A.)</b>
<i>Qualification(s):</i>	Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.
<i>Amount:</i>	1 award of \$1,000
<b>Wellington Laboratories Scholarship [I4308]</b>	
Wellington Laboratories, with the assistance of the Ontario government's OSOTF program, established this award through an endowment provided by Mr. Brock Chittim of Wellington Laboratories. Highly qualified students will be notified by the Chair of the Department of Chemistry and the Department Awards Committee to complete a Financial Need Assessment Form (N.A.F.) and submit to Student Financial Services by February 1. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Mr. Brock Chittim of Wellington Laboratories</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 15.0 course credits of an honours major program offered by the Department of Chemistry. Student with demonstrated financial need and the highest cumulative averages in at least three 3000 level chemistry courses taken in semesters 5 or 6. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,000
<b>William &amp; Nona Heaslip Scholarship [I0589]</b>	
Two awards, each payable at \$7,500 in the fall and winter semesters are awarded to a full-time undergraduate students in their second year of study in any degree program with a minimum 70% cumulative average and demonstrated financial need. 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. Students must apply to Student Financial Services by submitting a Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The William and Nona Heaslip Foundation</b>
<i>Qualification(s):</i>	Full-time undergraduate student registered in any degree program that is a Canadian citizen/permanent resident with a minimum 70% cumulative average with demonstrated financial need.
<i>Amount:</i>	2 awards of \$15,000
<b>In-course Awards with Financial Need</b>	
<b>Bette Stephenson Accessibility Bursary [I3054]</b>	
In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.
<i>Amount:</i>	3 awards to a maximum of \$1,500
<b>Brinson Partners Inc. Bursaries [I3526]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Brinson Partners Inc.</b>
<i>Qualification(s):</i>	Students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Burnbrae Farms

**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

**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 by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Class of '72: 25th Reunion

**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

**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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.

**Donor(s):** Mrs. Elizabeth Burton

**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 up to \$2000

**Gryphon Investment Council Bursaries [I3513]**

Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Gryphon Investment Council Inc.

**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 Bursary [I3061]**

This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.

**Donor(s):** Student Health and Dental Plan Reserve

**Qualification(s):** All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.

**Amount:** Several varies to a maximum \$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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.

**Donor(s):** Undergraduate Students

**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 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.

**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. Awarded in the Winter semester. 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

**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):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

**Donor(s):** Mrs. Norma L. Valeriotte

**Qualification(s):** Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.

**Amount:** Several 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. Awarded in the Winter semester.

**Donor(s):** Family and friends of Irvine and Grace B.L.A.ck

**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

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Estate of Mary I. Whitelock

**Qualification(s):** All undergraduate, graduate or O.A.C. diploma 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

**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. Awarded in the Winter semester.

**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

**Robert Auger Humanitarian Bursary [I3058]**

This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.

**Donor(s):** Office of Registrarial Services

**Qualification(s):** Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.

**Amount:** Several awards of \$500

**Ron Scriver Memorial Bursary [I3547]**

Established in memory of Mr. Ron Scriver (1946 - 32005) C.P.E.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. ACCESS AWARD

**Donor(s):** Family and Friends of Ron Scriver

**Qualification(s):** Students registered in any program offered by C.P.E.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 \$1,500

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** Scotiabank

**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

**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 undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000

**Donor(s):** Alumni and Friend of the University of Guelph

**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. Awarded in the Winter semester. ACCESS AWARD

**Donor(s):** University of Guelph Alumni Association

**Qualification(s):** Full-time in-course 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 \$1,000

**University of Guelph Child Care Bursaries [I3053]**

In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.

**Donor(s):** University of Guelph

**Qualification(s):** Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.

**Amount:** Several awards of up to \$2,000

**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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.

**Donor(s):** University of Guelph

**Qualification(s):** Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

**Amount:** Several varies

**University of Guelph Undergraduate In-Course Bursaries (MET-TR-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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards ranging in value from \$100 to \$3,000

**University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [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. Awarded in the Winter semester.

**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 and a minimum of 2.0 course credits completed.

**Amount:** Several awards to a maximum of \$800

**University Police Bursaries [I3019]**

The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.

**Donor(s):** The University Police

**Qualification(s):** Full-time undergraduate and graduate students who have financial need.

**Amount:** Several of various amounts

**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. Typically, awarded in the Winter semester.

**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

## In-course Travel Grants

### Aeroplan International Travel Grant [T0604]

Established to provide students with an airline ticket to international destinations served by Air Canada or its Star Alliance partners. Apply by submitting a Financial Need Assessment Form accompanied by the standard Travel Grant Application by June 1 for Fall travel, October 1 for winter travel, and February 1 for summer travel to Student Financial Services. Award is subject to the availability of Aeroplan miles and may not be available every year.

**Donor(s):** Aeroplan

**Qualification(s):** Full-time students with a minimum cumulative average of 70%, completion of a minimum of 5.0 credits and confirmed participation in University of Guelph travel activities related to their academic program. Preference will be given to students participating in the semester abroad or academic exchanges.

**Amount:** 1 plane ticket per each semester

### Arthur D. Latonnell Undergraduate Travel Grants [T0058]

An endowment fund established in memory of Arthur D. Latonnell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.

**Donor(s):** The Estate of Arthur D. Latonnell

**Qualification(s):** Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.

**Amount:** several up to a maximum of \$1000

### Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]

The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.

**Donor(s):** Canadian Friends of the Hebrew University in Jerusalem

**Qualification(s):** Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

**Amount:** 3 Awards with varying amounts

### Physics Travel Scholarship [T0400]

This award is given annually to assist students with travel and/or housing costs associated with attending a semester or more of academic study or co-operative work experience at a recognized university outside Canada. Depending on availability of funds, more than one recipient may be selected for this award. Applications must be accompanied by a one-page description of the planned travel, including budget, to the Chair of the Department of Physics at least two months prior to departure.

**Donor(s):** Department of Physics

**Qualification(s):** Student who has completed at least semester 4 of one of the majors in the Physics program with a cumulative average of 80% or greater, and who has obtained a Letter of Permission to attend the University abroad.

**Amount:** 1 award of \$500

### Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]

The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.

**Donor(s):** The Estate of Richard Hungerford

**Qualification(s):** Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. 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 to a maximum of \$1,000

### University of Guelph Travel Scholarships [T0421]

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

**Donor(s):** University of Guelph

**Qualification(s):** Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

**Amount:** Several up to \$1,000

## 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.**

### Entrance Scholarships

<b>Elaine Harris Memorial Scholarship [E2108]</b>	
Family and friends of Elaine Harris, who in her short lifetime demonstrated exemplary care and love for all animals, have established this scholarship. Application not required.	
<i>Donor(s):</i>	<b>Shirley and Phil Harris</b>
<i>Qualification(s):</i>	Student entering Phase 1 of the D.V.M. program. 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.
<i>Amount:</i>	1 award of \$500
<b>Grey County Cattlemen's Association Entrance Award [E2073]</b>	
The Grey County Cattlemen's Association has donated an entrance scholarship to a student from Grey County entering Phase 1 of the D.V.M. program. Application not required.	
<i>Donor(s):</i>	<b>The Grey County Cattlemen's Association</b>
<i>Qualification(s):</i>	Student from Grey County entering Phase 1 of the D.V.M. program with the highest average.
<i>Amount:</i>	1 award of \$100
<b>Jennifer Margaret Francis Memorial Award [E2000]</b>	
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. The award is payable over 4 years to a student from the Region of Ottawa-Carleton entering Phase 1 of the D.V.M. program. Apply to the Student Financial Services by October 7 with a completed Financial Need Assessment Form (N.A.F.). One award of \$6,000 (paid \$1,500 per year for a maximum of four years). This award is offered once every 4 years to an entering D.V.M. student. Apply to Student Financial Services with a completed Need Assessment Application by October 7.	
<i>Donor(s):</i>	<b>Mrs. Jean Francis</b>
<i>Qualification(s):</i>	Student from the Region Ottawa-Carleton entering Phase 1 of the D.V.M. program, based on financial need and academic performance.
<i>Amount:</i>	1 award of \$6,000
<b>Quinte District Veterinary Medical Association [E2002]</b>	
Award provided by the Quinte Animal Welfare Foundation. Application not required.	
<i>Donor(s):</i>	<b>Quinte District Veterinary Medical Association</b>
<i>Qualification(s):</i>	Student entering Phase 1 of the D.V.M. program from one of the following counties: Lennox and Addington, Prince Edward, Hastings or Northumberland with the highest average on eight required courses and MCAT score.
<i>Amount:</i>	1 award of \$250
<b>Entrance Awards with Financial Need</b>	
<b>Dr. Alan Meek Bursary [E2159]</b>	
The Jean Rich Foundation has established this award to honour Dr. Alan H. Meek's ten years of exceptional leadership as Dean of the Ontario Veterinary College, 1994 - 2004. This award will provide a D.V.M. student with \$5,000 per annum for up to four years, from entrance through to graduation, provided that academic performance is satisfactory and financial need is demonstrated. This award is offered once every 4 years to an entering D.V.M. student. Apply to Student Financial Services with a completed Need Assessment Application by October 7.	
<i>Donor(s):</i>	<b>The Jean Rich Foundation</b>
<i>Qualification(s):</i>	Student entering Phase 1 of the D.V.M. program with the greatest financial need.
<i>Amount:</i>	1 award of \$20,000

<b>Eleanor McEwen Bursaries [E2153]</b>	
Established by the Jean Rich Foundation, this award is paid out over four years at \$5,000 per year. Not tenable with other awards of \$5,000 per year or greater. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by Oct. 7. One award of \$20,000 (paid at \$5,000 per year for four years). This award is offered once every 4 years to an entering D.V.M. student. Apply to Student Financial Services with a completed Need Assessment Application by October 7.	
<i>Donor(s):</i>	<b>The Jean Rich Foundation</b>
<i>Qualification(s):</i>	Students entering the Phase 1 of the D.V.M. program with the greatest demonstrated need of financial assistance. Satisfactory academic progress and continued demonstration of financial need is required to receive each annual payment of this award.
<i>Amount:</i>	1 award of \$20,000
<b>Peter Rich Bursaries [E2123]</b>	
Established by the Jean Rich Foundation, this award is paid out over four years at \$5,000 per year. Not tenable with other awards of \$5,000 per year or greater. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by Oct. 7. One award of \$20,000 (paid at \$5,000 per year for four years).	
<i>Donor(s):</i>	<b>The Jean Rich Foundation</b>
<i>Qualification(s):</i>	Students entering the Phase 1 of the D.V.M. program with the greatest demonstrated need of financial assistance. Satisfactory academic progress and continued demonstration of financial need is required to receive each annual payment of this award.
<i>Amount:</i>	1 award of \$20,000

### In-course Scholarships

<b>AAEP/Frank J. Milne Memorial Award [C2103]</b>	
The American Association of Equine Practitioners (AAEP) has established this award in memory of Dr. Frank J. Milne, an inspiring teacher and respected faculty member at the Ontario Veterinary College from 1953 to 1984. Application not required.	
<i>Donor(s):</i>	<b>The American Association of Equine Practitioners</b>
<i>Qualification(s):</i>	Student who has successfully completed Phase 4 of the D.V.M. program and demonstrated skills in large animal surgery in the course VETM*4840 (Large Animal Clinics).
<i>Amount:</i>	1 award of \$500
<b>American Animal Hospital Association Prize [C2003]</b>	
Donated by the American Animal Hospital Association. Application not required. Awarded an engraved plaque, a commendation in the AAHA publication, a five year a membership in AAHA and a 5 year AHAA meeting membership.	
<i>Donor(s):</i>	<b>The American Animal Hospital Association</b>
<i>Qualification(s):</i>	Student successfully completing Phase 4 of the D.V.M. program. The prize will be awarded based on proficiency in VETM*4830 (Small Animal Clinics).
<i>Amount:</i>	1 Engraved Plaque, a commendation in the AAHA publication, a five year membership in AAHA, and a 5 year AAHA meeting membership
<b>Andrea Nott Memorial Scholarship [I2158]</b>	
This award was established in memory of Andrea Nott, an aspiring veterinarian whose life was cut short by an automobile accident in the summer of 2002. Her compassion and caring marked every activity she undertook. The decision will be based on feedback from the laboratory facilitator, an evaluation by the standardized client, and the student's grade on his/her own assessment of, and reflection on, the videotaped interview. No application required.	
<i>Donor(s):</i>	<b>Callbeck Animal Hospital</b>
<i>Qualification(s):</i>	D.V.M. student who have successfully completed Phase 1 and is completing Art of Veterinary Medicine I (VETM*3210) who best demonstrates the elements of effective interpersonal communication through active listening, demonstration of empathy and compassion to the client, and an understanding of the importance of the client's feelings, emotions and values in the clinical interview.
<i>Amount:</i>	1 award of \$750
<b>Andrew Leslie MacNabb Prize [C2031]</b>	
Presented by the O.V.C. Alumni Association. Application not required.	
<i>Donor(s):</i>	<b>American Board of Veterinary Public Health</b>
<i>Qualification(s):</i>	Student who has successfully completed Phase 4 of the D.V.M. program with the highest mark in veterinary public health in VETM*4850 (Health Management).
<i>Amount:</i>	1 award of \$200

<b>Andrew Smith Memorial Medal [C2060]</b>
Presented by O.V.C. in memory of the late Andrew Smith, founder of the Ontario Veterinary College. Application not required.
<i>Donor(s):</i> <b>Friends and family of Andrew Smith</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Medal
<b>Auxiliary to Ontario Veterinarians Award [I2076]</b>
Endowed by the Auxiliary to Ontario Veterinarians, supporting the profession from 1946 to 1990. Application not required.
<i>Donor(s):</i> <b>The Auxiliary to Ontario Veterinarians</b>
<i>Qualification(s):</i> 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
<i>Amount:</i> 1 Award amount varies
<b>Aventix Animal Health Prize in Dentistry [C2149]</b>
Provided by Aventix Animal Health. Application not required.
<i>Donor(s):</i> <b>Aventix Animal Health</b>
<i>Qualification(s):</i> 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*4830 (Small Animal Clinics).
<i>Amount:</i> 1 award of \$250
<b>Aventix Animal Health Prize in Ophthalmology [C2138]</b>
Provided by Aventix Animal Health. Application not required.
<i>Donor(s):</i> <b>Aventix Animal Health</b>
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the D.V.M. program who has the highest mark in the Ophthalmology rotation of the course VETM*4830 (Small Animal Clinics).
<i>Amount:</i> 1 award of \$250
<b>BarB Crowe &amp; Don Kuzik Memorial Scholarship [I2155]</b>
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 not required.
<i>Donor(s):</i> <b>BarB Crowe</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$1,000
<b>Beloved Friends Award [C2007]</b>
Established by Rose McBride. Application not required.
<i>Donor(s):</i> <b>Mrs. Rose McBride</b>
<i>Qualification(s):</i> Student who has completed Phase 4 of the D.V.M. program and who has demonstrated kindness and care in the treatment of animals in the medicine and surgery clinics.
<i>Amount:</i> 1 award of \$500
<b>Betty Goldhart Scholarships in Medical Genetics [I2024]</b>
Application not required.
<i>Donor(s):</i> <b>The Estate of Betty Goldhart</b>
<i>Qualification(s):</i> 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).
<i>Amount:</i> 1 award of \$75
<b>Bill Taylor Memorial Scholarship [I0280]</b>
Applications to include a supporting letter from a coach or intramural supervisor. Apply to Student Financial Services by April 1.
<i>Donor(s):</i> <b>AMF Canada Ltd.</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$900

<b>CALAM/ACMAL Scholarship [C2078]</b>
Established by the Canadian Association for Laboratory Animal Medicine/L'Association Canadienne de la Médecine 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 OVC Assistant Dean, Student Affairs, by February 15.
<i>Donor(s):</i> <b>Canadian Association for Laboratory Animal Medicine/L'Association Canadienne de la Médecine des Animaux de Laboratoire (CALAM/ACMAL)</b>
<i>Qualification(s):</i> Full-time students in the D.V.M. program who have completed Phase 4
<i>Amount:</i> 1 plaque, 1 award of \$250
<b>Canadian Parrot Symposium's Prize in Avian Studies [C2130]</b>
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 not required.
<i>Donor(s):</i> <b>The Canadian Parrot Symposium</b>
<i>Qualification(s):</i> Undergraduate student registered in the D.V.M. program or graduate student registered in the Faculty of Graduate Studies that is enrolled in a department at the Ontario Veterinary College and is pursuing studies dealing with companion birds, their welfare and well-being, and the human/companion bird relationship.
<i>Amount:</i> 1 up to \$1,500
<b>Canadian Veterinary Medical Association Prize [C2014]</b>
Established by the Canadian Veterinary Medical Association (CVMA). Application not required. The recipient will be selected by the final year class on the basis of demonstrated leadership abilities.
<i>Donor(s):</i> <b>Canadian Veterinary Medical Association</b>
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the D.V.M. program.
<i>Amount:</i> 1 Plaque
<b>Canadian Veterinary Medical Association Prize [I2015]</b>
Established by the Canadian Veterinary Medical Association (CVMA). Application not required.
<i>Donor(s):</i> <b>Canadian Veterinary Medical Association</b>
<i>Qualification(s):</i> Student who have completed Phase 3 of the D.V.M. program. The recipient will be selected by members of the third year class on the basis of leadership and achievement in student affairs.
<i>Amount:</i> 1 award of \$800, and a plaque
<b>Charles Duncan McGilvray Prize [C2034]</b>
The Class of O.V.C.'41 has donated this award to honour the memory of Dr. C.D. McGilvray, Principal of the Ontario Veterinary College, 1918-45. Application not required. One award of \$200 and a framed certificate
<i>Donor(s):</i> <b>OVC Class - 1941 (Dr. D.A. Barnum, OVC)</b>
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the D.V.M. program who by scholarship, leadership, personality, character, and interest made a worthy contribution to the College as an undergraduate and who is the College's nominee for the Winegard Medal.
<i>Amount:</i> 1 award of \$200
<b>Charles M. Baker Memorial Prize [I2006]</b>
Provided by Dr. J.M. Baker of Meaford in memory of Dr. Charles Baker, O.V.C.'23. Application not required.
<i>Donor(s):</i> <b>Dr. M. Baker and Mrs. Charles Baker</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$200
<b>College of Veterinarians of Ontario Prize [I2080]</b>
Established by the College of Veterinarians of Ontario. Application not required.
<i>Donor(s):</i> <b>College of Veterinarians of Ontario</b>
<i>Qualification(s):</i> Student who has completed Phase 4 of the D.V.M. program and has been active in college or university affairs.
<i>Amount:</i> 1 award of \$750

<b>Deans' Scholarships [I0323]</b>	
Offered by the Board of Governors. Recipients will be selected by each of the College Awards Committees. Winners will be notified in the Fall semester. Application not required.	
<i>Donor(s):</i>	<b>Board of Governors</b>
<i>Qualification(s):</i>	Students registered in any degree program. The primary academic criteria is placement on the Deans' Honours List for two consecutive semesters, excluding semesters 7 and 8 or Phase 4 of the D.V.M. program, in the previous Fall/Winter/Summer sequence.
<i>Amount:</i>	150 awards of \$1,000

<b>Dorothea Daniell-Jenkins Memorial Scholarship [I2107]</b>	
Friends, family and fellow dog fanciers have established a scholarship in memory of Dorothea Daniell-Jenkins, a respected judge and Terrier breeder. Application not required.	
<i>Donor(s):</i>	<b>Friends and family of Dorothea Daniell-Jenkins</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$700

<b>Dr. A. Noel-Smith Memorial Award [C2090]</b>	
Provided by the Oakville Humane Society in honour of Dr. A. Noel-Smith. Application not required.	
<i>Donor(s):</i>	<b>Oakville Human Society</b>
<i>Qualification(s):</i>	Student completing Phase 4 of the D.V.M. program with high academic standing, who is a resident of Oakville or the Regional Municipality of Halton, and who has made a contribution to humane activities during the course of studies.
<i>Amount:</i>	1 award of \$500

<b>Dr. C.K. "Chuck" Roe Memorial Scholarship [I2096]</b>	
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 have endowed this memorial scholarship. Application not required.	
<i>Donor(s):</i>	<b>Mrs Lillian Roe</b>
<i>Qualification(s):</i>	Student who has completed Phase 3 of the D.V.M. program with the highest grade in the swine health management components of the courses VETM*4530 (Advanced Health Management) and VETM*4460 (Food Animal Medicine and Surgery). The recipient's participation in College and other extracurricular activities will also be considered.
<i>Amount:</i>	1 award of \$500

<b>Dr. D.J. McLellan Scholarship [C2035]</b>	
Provided by the estate of Dr. D.J. McLellan (O.V.C.'17). Application not required.	
<i>Donor(s):</i>	<b>Estate of Dr. and Mrs. David John McLellan</b>
<i>Qualification(s):</i>	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*4840 (Large Animal Clinics) and VETM*4850 (Health Management).
<i>Amount:</i>	1 award of \$2,000

<b>Dr. George Rankin Memorial Equine Scholarship [I2053]</b>	
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 by January 15.	
<i>Donor(s):</i>	<b>Mrs. George Rankin</b>
<i>Qualification(s):</i>	Student in the D.V.M. program who is entering Phase 4 (final year), and who has a minimum B average.
<i>Amount:</i>	1 award of \$1,000

<b>Dr. Ian B. Johnstone Veterinary Physiology Prize [I2160]</b>	
Family and friends of Dr. Ian B. Johnstone (OVC '66) have established this memorial award to recognize his valued contribution to the teaching of physiology in the D.V.M. program at the Ontario Veterinary College. Application not required	
<i>Donor(s):</i>	<b>Friends and family of Ian B. Johnstone</b>
<i>Qualification(s):</i>	Full-time D.V.M. student who achieves the highest grade in the course VETM*3080 (Veterinary Physiology).
<i>Amount:</i>	1 award of \$500

<b>Dr. J. Grant Savage (OVC '48) Memorial Prize [I2140]</b>	
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. Application not required.	
<i>Donor(s):</i>	<b>Family and friends of Dr. J. Grant Savage</b>
<i>Qualification(s):</i>	Full-time student completing Phase 3 of the D.V.M. program. 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.
<i>Amount:</i>	1 award of \$800

<b>Dr. Jack Lange Memorial Scholarship [C2122]</b>	
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 not required.	
<i>Donor(s):</i>	<b>Family, friends and colleagues of Dr. Jack Lange, OVC '71</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$500

<b>Dr. Jean Rumney Memorial Scholarships [I2098]</b>	
Donated by the Hamilton Dog Obedience Club Incorporated in memory of Dr. Jean Rumney (O.V.C.'39). Application not required. One award of \$600 (first place) and one of \$400 (second place).	
<i>Donor(s):</i>	<b>The Hamilton Dog Obedience Club Inc.</b>
<i>Qualification(s):</i>	Students who have completed Phase 2 of the D.V.M. program, and who rank first and second in the small animal portions of the courses VETM*3430 (Clinical Medicine I) and VETM*3430 (Clinical Medicine II).
<i>Amount:</i>	1 award of \$600, 1 award of \$400

<b>Dr. John Lindner Award [I2126]</b>	
Donated by Kingsdale Animal Hospital and the family of Dr. John Lindner (O.V.C.'73) an esteemed companion animal practitioner and humanitarian. Application not required.	
<i>Donor(s):</i>	<b>Kingsdale Animal Hospital and the family of John Lindner</b>
<i>Qualification(s):</i>	Student who has completed Phase 1 of the D.V.M. program. Recipient will be selected on the basis of academic performance in the course VETM*3070 Veterinary Anatomy.
<i>Amount:</i>	1 award of \$500

<b>Dr. John Reeve-Newson Emergency Medicine Prize [C2150]</b>	
Presented by the Veterinary Emergency Clinic of Toronto in recognition of the exceptional contributions of Dr. John Reeve-Newson. Dr. Reeve-Newson served as chair of the clinic board for over 25 years, and was instrumental in the development and growth of the facility. Application not required.	
<i>Donor(s):</i>	<b>The Veterinary Emergency Clinic</b>
<i>Qualification(s):</i>	Student completing Phase 4 of D.V.M. program, who has the highest mark in the Emergency & Critical Care Medicine rotation of the course Small Animal Clinics ( VETM*4830 ).
<i>Amount:</i>	1 award of \$1,000

<b>Dr. Jonathon Bloom (OVC '93) Ambassadorial Scholarship [C2114]</b>	
Jonathan Bloom (O.V.C.'93) and his family have endowed this award. Application not required.	
<i>Donor(s):</i>	<b>Dr. and Mrs. Howard Bloom</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$400

<b>Dr. Neal Mendelson Memorial Award [C2089]</b>
Donated by the family of Dr. Neal G. Mendelson (O.V.C.'47), a renowned equine practitioner. Application not required.
<i>Donor(s):</i> Mrs. Barbara Mendelson
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the D.V.M. program, and is the most proficient in equine studies based on grades in courses VETM*4450 (Equine Medicine and Surgery) and VETM*4840 (Large Animal Clinic) rotations.
<i>Amount:</i> 1 award of \$200
<b>Dr. Roy S. Moore Memorial Award [I0046]</b>
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 Assistant Dean for Student Affairs, O.V.C., by January 15.
<i>Donor(s):</i> Mrs. Shirley Moore
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$350
<b>Dr. Samuel Downing Stirk Memorial Award [C2066]</b>
Donated by the family of Dr. Samuel Downing Stirk. Application not required. One award of \$250 and a framed picture.
<i>Donor(s):</i> Dr. Gerald D. Stirk
<i>Qualification(s):</i> 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*4850 (Health Management).
<i>Amount:</i> 1 award of \$250
<b>Dr. W.J. Stinson Scholarship [C2065]</b>
Provided by the Dr. W.J. Stinson Scholarship Fund Committee. Application not required.
<i>Donor(s):</i> Dr. W.J. Stinson Scholarship Fund Committee
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the D.V.M. program and who is the most proficient in bovine reproduction and obstetrics.
<i>Amount:</i> 1 award of \$200
<b>Dr. Wendy Parker Award in Clinical Dermatology, sponsored by Aventix Animal Health [C2158]</b>
Provided by Aventix Animal Health and recognizing the support of retired professor, Dr. Wendy Parker. Application not required.
<i>Donor(s):</i> Aventix Animal Health
<i>Qualification(s):</i> 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*4830 (Small Animal Clinics).
<i>Amount:</i> 1 award of \$250
<b>Elsevier Prize [I2058]</b>
Provided by Elsevier Science Canada. Application not required.
<i>Donor(s):</i> Elsevier Science Canada
<i>Qualification(s):</i> Students completing Phase 3 of the D.V.M. program with the highest average in VETM*4460 (Food Animal Medicine and Surgery) and VETM*4470 (Medicine and Surgery of the Dog and Cat).
<i>Amount:</i> 1 prize of a subscription
<b>F.W. Schofield Prize in Pathology [C2059]</b>
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 not required.
<i>Donor(s):</i> Dr. F.W. Schofield
<i>Qualification(s):</i> Student completing Phase 4 of the D.V.M. program with the highest ranking in Pathology.
<i>Amount:</i> 1 award of \$500

<b>George A. Gray O.A.C. '51 Varsity Scholarships [I0487]</b>
Established in memory of George Gray, O.A.C. '51, a Guelph football lineman and a great player of the game. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.
<i>Donor(s):</i> Mrs. George A. Gray
<i>Qualification(s):</i> Undergraduate degree or diploma students who are members of varsity teams and in the second, third, fourth or fifth year of full-time study with a minimum 70% average in all courses completed in the previous year of study and have demonstrated leadership. Selection will include equally weighted consideration of academic performance, leadership and financial need. Preference will be given to members of the varsity football team. Examples of leadership may include academic tutoring, mentoring team mates, assisting in the organization and promotion of varsity and/or intramural athletics, participation on university committees, such as in residences, on Senate or in Colleges, and similar off-campus activities. Students may receive the award up to four times.
<i>Amount:</i> 2 awards of \$1,250
<b>Governor General's Medal [C0044]</b>
Established by the Office of the Governor General of Canada. Application not required.
<i>Donor(s):</i> The Chancellor
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 Silver medal
<b>Holstein Association of Canada Prize [C2026]</b>
Presented by the Holstein Association of Canada. Application not required.
<i>Donor(s):</i> Holstein Association of Canada
<i>Qualification(s):</i> 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*4840 (Large Animal Clinics) and VETM*4850 (Health Management).
<i>Amount:</i> 1 award of \$400
<b>International Undergraduate Scholarship [I0577]</b>
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. Financial need will be considered only in the event of a tie. Apply to Student Financial Services, by April 1, with a letter indicating involvement/extracurricular activity since entry to the University, two academic and/or professional references, and a completed Financial Need Assessment Form (N.A.F.) for International Students form. This award can only be held once by the student.
<i>Donor(s):</i> International Student Organization (ISO)
<i>Qualification(s):</i> Full-time International 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 75%, and is registered at the time of application.
<i>Amount:</i> 1 award of \$1,000
<b>Invisible Fence Canine Behaviour &amp; Training Scholarship [I2164]</b>
Apply to the Office of the Assistant Dean for Student Affairs, O.V.C., by January 30 with a letter, a curriculum vitae, a one-page description of the project, and a supporting letter from the faculty member with whom the student proposes to work. The recipient will be chosen based on their involvement in a project which will provide educational value to the student about animal behaviour and is most likely to have a direct positive impact on companion animal welfare.
<i>Donor(s):</i> Invisible Fence
<i>Qualification(s):</i> D.V.M. students currently registered in Phases 1 or 2 who are pursuing, during the summer months, a research project related to the behaviour of companion animals.
<i>Amount:</i> 1 award of \$3,000
<b>J.P.W. Gilman Prize [I2022]</b>
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 not required.
<i>Donor(s):</i> Friends and colleagues of J.P.W. Gilman
<i>Qualification(s):</i> Student who has completed Phase 1 of the D.V.M. program with the highest grade in the course VETM*3120 Veterinary Histology.
<i>Amount:</i> 1 award of \$200

**James and Marjorie Pinkney Studentship Research Award [I2125]**

This award was established by Dr. R. James Pinkney, a distinguished alumnus of O.V.C.'37. Dr. Pinkney was a veterinary practitioner in Cooksville for over forty years and received numerous awards for sportsmanship in agricultural competition and leadership in agriculture. Applications must be submitted by candidates and their supervising faculty members to the Assistant Dean for Student Affairs, O.V.C., by January 22.

*Donor(s):* **Dr. R. James Pinkney**

*Qualification(s):* Student in the D.V.M. program in Phases 1, 2, or 3 who is pursuing, during the summer months, a research project related to the health and welfare of animals. Students taking part in the Phase 3 externship program may receive a portion of the award for the non-externship portion of the summer.

*Amount:* 1 award of \$4,000

**Katherine Elizabeth Long D.V.M. Memorial Scholarship [C2088]**

This memorial scholarship was established by the family of Kathy Long D.V.M. (O.V.C.'88). Application 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 \$1,000

**Kievit Memorial Scholarship in Surgery [C2027]**

The class of '66 presents this scholarship in memory of their classmate T.M. Kievit. Application not required.

*Donor(s):* **OVC '66**

*Qualification(s):* 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.

*Amount:* 1 award of \$100

**Lambda Foundation Scholarship in LGBT Studies [I0591]**

This award is provided to encourage research on the subject of lesbian, bisexual, gay and transgendered (LGBT) peoples. The scholarship is based upon areas of research pertaining to the history, contributions, and issues by or about LGBT peoples. Preference will be given to an applicant who is involved in the LGBT 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 LGBT 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 (LGBT) 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.

*Donor(s):* **Students, staff, faculty and friends of Dr. Leonard Conolly**

*Qualification(s):* Full-time visiting exchange undergraduate or graduate 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). 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.

*Amount:* 1 award of \$1,000

**Luke Thomson Memorial Award [I2119]**

Donated by Dr. Catherine Thomson-McGhie (O.V.C.'91). Article submission to the O.V.C. Awards Committee by January 31.

*Donor(s):* **Dr. Catherine Thomson McGhie (OVC '91)**

*Qualification(s):* Student enrolled in the D.V.M. program who has submitted an article suitable for publication dealing with the Human-Companion Animal Bond and its relevance in veterinary practice. The article must be completed according to the Canadian Veterinary Journal format for Brief Communications.

*Amount:* 1 award of \$500

**Major James Rattray Proficiency Prizes [I2054]**

Awarded by the College in memory of Major James Rattray. Application not required.

*Donor(s):* **James Rattray Estate**

*Qualification(s):* D.V.M. students completing each of Phases 1, 2, and 3 with the second highest class standings for the Phase.

*Amount:* 3 awards of \$200

**Merial Canada Inc. Award of Merit [C2051]**

Donated by Merial Canada Inc. Application not required.

*Donor(s):* **Merial Canada Inc.**

*Qualification(s):* Student who has successfully completed Phase 4 of the D.V.M. program and who is judged to be the most proficient in small animal medicine in the course VETM\*4830 (Small Animal Clinics).

*Amount:* 1 award of \$200, 1 commemorative plaque

**Merial Canada Inc. Scholarship [I2052]**

Donated by Merial Canada Inc. Application not required.

*Donor(s):* **Merial Canada Inc.**

*Qualification(s):* Student having completed Phase 2 of the D.V.M. program and who has the highest standing in the course VETM\*3470 (Anesthesiology).

*Amount:* 1 award of \$200, 1 commemorative plaque

**Molly Carrington (OVC '78) Memorial Scholarship [C2016]**

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 not required.

*Donor(s):* **Class of OVC '78**

*Qualification(s):* Student who has successfully completed Phase 4 of the D.V.M. program and who has demonstrated proficiency in Small Animal Medicine in the course VETM\*4830 (Small Animal Clinics) and also demonstrated high standard of case care and compassion for his or her patients.

*Amount:* 1 award of \$500

**Norman W. Simmons Memorial Award [I2124]**

Established in memory of Norman W. Simmons. Application not required.

*Donor(s):* **The estate of Norman W. Simmons**

*Qualification(s):* Student who has completed Phase 3 of the D.V.M. program with the highest grade in the course VETM\*4480 (Comparative Medicine).

*Amount:* 1 award of \$500

**Novartis Animal Health Canada Inc. Scholarship [I2079]**

Donated by Novartis. Application not required.

*Donor(s):* **Novartis**

*Qualification(s):* Student who has completed Phase 2 of the D.V.M. program with the highest grade in the small animal parasitology component of the course VETM\*3450 (Principles of Disease).

*Amount:* 1 award of \$500

**Ontario Association of Bovine Practitioners' Award [C2093]**

Donated by the Ontario Association of Bovine Practitioners. Application not required.

*Donor(s):* **Ontario Association of Bovine Practitioners**

*Qualification(s):* 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\*4850 (Health Management).

*Amount:* 1 award of \$500

<b>Ontario Association of Swine Practitioners' Prize [I2147]</b>
Presented by the Ontario Association of Swine Practitioners. Apply by letter, stating swine industry experience to date, and include the required essay, to the Assistant Dean for Student Affairs, OVC, by January 15. Selection will be based on the best essay submitted describing an issue facing the swine industry.
<i>Donor(s):</i> <b>Ontario Association of Swine Practitioners</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$250
<b>Ontario Pork Producers' Marketing Board Prize [C2041]</b>
Donated by the Ontario Pork Producers' Marketing Board. Application not required.
<i>Donor(s):</i> <b>Ontario Pork Producers' Marketing Board</b>
<i>Qualification(s):</i> 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*4850 (Health Management).
<i>Amount:</i> 1 award of \$500
<b>OSPCA Veterinary Student Prize [I2146]</b>
Established by the Ontario Society for the Prevention of Cruelty to Animals in recognition of its 100th anniversary. Application not required. One award of a \$500 University of Guelph bookstore gift certificate
<i>Donor(s):</i> <b>The Ontario Society for the Prevention of Cruelty to Animals</b>
<i>Qualification(s):</i> 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 as defined by the OSOTF program (see General Statements on Awards).
<i>Amount:</i> 1 award of \$500
<b>OTS Delta Club Scholarship [I2039]</b>
Donated by the OTS Delta Club from the Ontario Veterinary College. Application not required.
<i>Donor(s):</i> <b>Delta Club of Omega Tau Sigma Fraternity</b>
<i>Qualification(s):</i> 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.
<i>Amount:</i> 1 award of \$300
<b>Ottawa-Carleton 1983 International Ploughing Match (OVC) Scholarships [I2094]</b>
Apply to Student Financial Services by April 1 with a completed Financial Need Assessment Form (N.A.F.) and a letter outlining extracurricular activities.
<i>Donor(s):</i> <b>Ottawa-Carleton International Ploughing Match Committee 1983</b>
<i>Qualification(s):</i> Student from the Region of Ottawa-Carleton who has completed Phase 1 of the D.V.M. program and who has a minimum cumulative average of 70%. Participation in extracurricular activities and financial need will be considered.
<i>Amount:</i> 1 award of \$1,000
<b>OVC '75 Scholarship in Memory of Aki Sasage [C2092]</b>
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 not required.
<i>Donor(s):</i> <b>The classmates and colleagues of Aki Sasage, OVC '75</b>
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the veterinary program with the highest standing in course VETM*4900 (Veterinary Externship).
<i>Amount:</i> 1 award of \$700
<b>OVC Alumni Association Proficiency Prizes (Convocation) [C2045]</b>
Presented by the O.V.C. Alumni Association. Application not required. One 1st place award of \$500, one 2nd place award of \$300, and one 3rd place award of \$200.
<i>Donor(s):</i> <b>OVC Alumni Association</b>
<i>Qualification(s):</i> Students who have successfully completed Phase 4 of the D.V.M. program, who have the three highest program averages.
<i>Amount:</i> 1 award of \$500, 1 award of \$300, 1 award of \$200
<b>OVC Alumni Association Proficiency Prizes (In-course) [I2048]</b>
Presented by the O.V.C. Alumni Association. Application not required.
<i>Donor(s):</i> <b>OVC Alumni Association</b>
<i>Qualification(s):</i> D.V.M. students successfully completing Phases 1, 2, and 3 with the highest class standing for the Phase.
<i>Amount:</i> 3 awards of \$500

<b>OVC Spirit Prize [I0469]</b>
Provided by the O.V.C. Alumni Association. Application not required.
<i>Donor(s):</i> <b>The Ontario Veterinary College Alumni Association</b>
<i>Qualification(s):</i> Student in Phase 1 of the D.V.M. program based on contributions to the O.V.C. community and his or her demonstration of leadership, sportsmanship, and the ability to get and keep his or her classmates involved in the O.V.C. community. The recipient will be selected on the basis of a class vote at the end of Phase 1.
<i>Amount:</i> 1 award of \$100
<b>OVMA Animal Behaviour and Welfare Award [I2095]</b>
Presented by the Ontario Veterinary Medical Association. Application not required. One award of \$250 and a plaque
<i>Donor(s):</i> <b>Ontario Veterinary Medical Association</b>
<i>Qualification(s):</i> 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 II).
<i>Amount:</i> 1 award of \$250
<b>OVMA-Erie Herd Health and Population Medicine Award [C2081]</b>
Presented by the Veterinary Association and the Ontario Veterinary Medical Association. Application not required. One award of \$500 and an engraved plaque.
<i>Donor(s):</i> <b>Ontario Veterinary Medical Association</b>
<i>Qualification(s):</i> Student who has successfully completed Phase 4 of the D.V.M. program who has the highest average in VETM*4850 (Health Management).
<i>Amount:</i> 1 award of \$500
<b>Pet Food Certification Nutrition Prize [I2161]</b>
The Canadian Veterinary Medical Association (C.V.M.A.) has established this award to raise awareness of the C.V.M.A. Pet Food Certification Program. One award is presented in each Canadian veterinary college to a student that submits the best case report. The winning report will be selected on the basis of scientific content, relevance to the field of small animal nutrition and quality of the manuscript. Reports must be 1000 to 2500 words in length and in a format suitable for publication in the Canadian Veterinary Journal. Submit reports to the OVC Assistant Dean for Student Affairs by January 22.
<i>Donor(s):</i> <b>Canadian Veterinary Medical Association</b>
<i>Qualification(s):</i> Full-time students in Phase 3 of the D.V.M. program with satisfactory academic standing.
<i>Amount:</i> 1 award of \$2,500
<b>Pfizer Animal Health Company Prizes [C2055]</b>
Pfizer Animal Health, Pfizer Canada Inc. presents two prizes to students in the D.V.M. program. Application not required. One award of \$150 (Large Animal Clinics) and one award of \$100 (Small Animal Clinics).
<i>Donor(s):</i> <b>Pfizer Company of Canada</b>
<i>Qualification(s):</i> Students who have successfully completed Phase 4 of the D.V.M. program and who have demonstrated greatest proficiency in large animal medicine in the course VETM*4840 (Large Animal Clinics) and greatest proficiency in small animal surgery in the course VETM*4830 (Small Animal Clinics).
<i>Amount:</i> 1 award of \$150, 1 award of \$100
<b>Pfizer Scholarship [I2049]</b>
Pfizer Animal Health, Pfizer Canada Inc. donates two scholarships to students in the D.V.M. program. Application not required.
<i>Donor(s):</i> <b>Pfizer Company of Canada</b>
<i>Qualification(s):</i> Students who have completed Phase 2 and Phase 3 of the D.V.M. program. The recipients will be selected by his or her classmates on the basis of scholarship and leadership.
<i>Amount:</i> 2 awards of \$600
<b>Robert Walker Memorial Scholarship [I2071]</b>
This award is presented by O.V.C.'78 in memory of their classmate, Robert Walker. Application not required.
<i>Donor(s):</i> <b>OVC '78</b>
<i>Qualification(s):</i> Student who has completed Phase 1 of the D.V.M. program with the highest standing in VETM*3070 (Veterinary Anatomy).
<i>Amount:</i> 1 award of \$150

<b>Royal Canadian Army Veterinary Corps Prize [I2097]</b>	
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 from the host to the O.V.C. Awards Committee by the end of Phase 2.	
<i>Donor(s):</i>	<b>Colonel C.E. Edgett (OVC 1906)</b>
<i>Qualification(s):</i>	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 merit of the proposal and academic performance.
<i>Amount:</i>	1 award of \$350

<b>Schering-Plough Canada Leadership Prize [I2133]</b>	
Schering-Plough Canada has established this prize as part of their commitment to veterinary education. Application not required.	
<i>Donor(s):</i>	<b>Schering-Plough Canada</b>
<i>Qualification(s):</i>	Student who has completed Phase 3 of the D.V.M. program and who, based on class nomination and a class vote, in the minds of his or her fellow students continues to demonstrate outstanding leadership, versatility of interests and involvement in community affairs, both within and outside the College and the University.
<i>Amount:</i>	1 award of \$750

<b>Schering-Plough Canada Prize in Bovine Reproduction [C2132]</b>	
Schering-Plough Canada has established this prize as part of their commitment to veterinary education. Application not required.	
<i>Donor(s):</i>	<b>Schering-Plough Canada</b>
<i>Qualification(s):</i>	Student successfully completing Phase 4 of the D.V.M. program who has exhibited outstanding performance in the theriogenology and ruminant field service rotations during his or her final year.
<i>Amount:</i>	1 award of \$750

<b>Stephanie Wilken Volunteer Award [I0449]</b>	
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.	
<i>Donor(s):</i>	<b>Bev and Darlene Wilken</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 award of \$1,000

<b>United Steelworkers Local 4120 Scholarship [I0293]</b>	
Apply to Student Financial Services, by January 31.	
<i>Donor(s):</i>	<b>United Steelworkers LU4120</b>
<i>Qualification(s):</i>	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. 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, provided that a minimum of 70% standing is obtained.
<i>Amount:</i>	1 award of \$1,000

<b>Van Stralen and Van Der Hoeven Memorial Scholarship [I0296]</b>	
Application will be made by nominations signed by 4 currently registered students forwarded to Student Financial Services by April 1. Presentations are made in the Fall semester.	
<i>Donor(s):</i>	<b>Mr. &amp; Mrs. J. Van Stralen &amp; family and Mr. &amp; Mrs. Hans Van Der Hoeven &amp; family</b>
<i>Qualification(s):</i>	Students that have completed a minimum of 2.0 credits, but not more than 7.5 in the Winter term in any degree program who have obtained a minimum of 70% standing. Selection will be made on the basis of participation in university activities and in the student's home community as well as qualities of leadership, ambition and initiative.
<i>Amount:</i>	2 awards of \$400

<b>W.C. Winegard Medal [C0311]</b>	
The W.C. Winegard Medal is the most prestigious graduating award of the University of Guelph. One student will be nominated by each College Awards Committee. The Senate Awards Committee will make the final selection and the medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>The Board of Governors' of the University</b>
<i>Qualification(s):</i>	Graduating student who excels both academically and in extracurricular activities.
<i>Amount:</i>	1 Gold medal

<b>W.G. Stevenson Memorial Scholarship [C2063]</b>	
Presented as a memorial to Dr. W. Gordon Stevenson O.V.C.'37 by Pfizer Animal Health. Application not required.	
<i>Donor(s):</i>	<b>Rogar/STB Division - BTI Products Inc.</b>
<i>Qualification(s):</i>	Student who has successfully completed Phase 4 of the D.V.M. program and who is most proficient in bovine reproduction and obstetrics in the course VETM*4850 (Health Management).
<i>Amount:</i>	1 award of \$150

<b>W.J.R. Fowler Prize [C2021]</b>	
Wilfreda Fowler Jackson presents a prize in memory of her father, Dr. W.J.R. Fowler. Application not required.	
<i>Donor(s):</i>	<b>Wilfreda Fowler Jackson</b>
<i>Qualification(s):</i>	Student who has successfully completed Phase 4 of the D.V.M. program who is most proficient in equine medicine and surgery in the course VETM*4840 (Large Animal Clinics).
<i>Amount:</i>	1 award of \$100

<b>W.N. Vaughan Medal [C0299]</b>	
Prospective candidates will be nominated by Senators and the medal winner will be chosen by a committee selected by the Striking Committee. The medal will be awarded at Convocation in June. Application not required.	
<i>Donor(s):</i>	<b>Friends of Walter N. Vaughan</b>
<i>Qualification(s):</i>	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.
<i>Amount:</i>	1 Medal

<b>Wyeth Case Report Awards [C2111]</b>	
Donated by Wyeth Veterinary Laboratories. Applicants must submit a case report to the Coordinator of the Externship Course, using the prescribed format before the date stated in the course outline.	
<i>Donor(s):</i>	<b>Wyeth Laboratories</b>
<i>Qualification(s):</i>	Students who have successfully completed Phase 4 of the D.V.M. program. The recipients will be selected on the basis of the quality of the case report required for completion of course VETM*4900 (Veterinary Externship). One award will be given for the best case report in production animals (swine, beef, or dairy) and the other award will be given for the best case report for companion animals.
<i>Amount:</i>	2 awards of \$500

### In-course Scholarships with Financial Need

<b>Euclid-Hitachi Scholarships [I4517]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Euclid-Hitachi of Canada Ltd.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Harvey Graham O.A.C. '39**

*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 \$5,000

**Guelph Varsity Athletic Accessibility Scholarship [I0518]**

Established by alumni and friends of the University of Guelph. Apply to Student Financial Services by October 7 providing a covering letter describing on- and off-campus academic and extra-curricular activities and a completed Financial Need Assessment Form (N.A.F.). Awarded at the annual Athletics Banquet.

*Donor(s):* **Alumni and friends of the University of Guelph**

*Qualification(s):* Undergraduate degree or diploma students, with at least 5.0 credits and less than 20.5 credits, who are members of a varsity athletic team and who have demonstrated financial need, are eligible to apply. Students must have maintained at least a 70% cumulative average in all courses completed in the previous year of study (minimum 3.0 credits). Selection will be based upon equally weighted consideration of academic performance and evidence of leadership qualities. Students may receive the award up to four times.

*Amount:* 2 awards of \$1,250

**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. Awarded in the Winter semester. ACCESS AWARD.

*Donor(s):* **The family of the late Howard N.B. Dorfman**

*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).

*Amount:* 1 award of \$250

**John B. Walkden and Malcolm T. Bond Prize [I2512]**

Established by John B. Walkden and Malcolm T. Bond, 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Estate of John B. Walkden**

*Qualification(s):* Full-time students in the D.V.M. program who has successfully completed the course Veterinary Externship (VETM\*4900). The recipient will have been judged to be proficient in bovine medicine and surgery during the externship, based on the host practitioner's evaluation. 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

**OVC Class of 1977 Memorial Scholarship [I2510]**

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 the scholarship honour all their classmates. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services, by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **OVC '77**

*Qualification(s):* Full-time students in the Phase 2 or Phase 3 of the D.V.M. program, with at least a 70% program average, and demonstrated financial need are eligible. Selection will be based on 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 \$800

**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 by letter, including a summary of local agricultural activities and a completed Financial Need Assessment Form (N.A.F.), to Student Financial Services by October 7. ACCESS AWARD

*Donor(s):* **The Shaw Scholarship Committee**

*Qualification(s):* Students registered in the B.A.Sc., B.Comm. in Agricultural Business, B.Sc.(Agr.) or D.V.M. programs studying agriculture, horticulture, equine studies, food and nutrition or veterinary sciences with demonstrated financial need, a 70% cumulative average and involvement in local agricultural activities. Preference will be given to first year 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 \$1,000

**Tara Lynn Giuliani Memorial Award [I0375]**

In memory of Tara Lynn Giuliani, a bright young woman, who did not let her blindness stand in the way of her studies at the University of Guelph. Apply to the Centre for Students with Disabilities by November 25.

*Donor(s):* **The Giuliani Family**

*Qualification(s):* Most academically promising applicant with a demonstrated disability and having financial need.

*Amount:* 1 award of \$500

**University of Guelph Retiree Association Degree Scholarship [I0569]**

This bursary is available to students who are related to a member of the U.G.R.A. as child, grand-child, or great grand-child. Selection will be based on the greatest demonstration of financial need. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) and a letter indicating the name of and relationship to the U.G.R.A. member.

*Donor(s):* **University of Guelph Retirees Association (U.G.R.A.)**

*Qualification(s):* Students registered in an undergraduate degree program with a minimum 75% cumulative average in the last two semester of full-time studies and demonstrates financial need.

*Amount:* 1 award of \$1,000

**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. Preference will be given to students enrolled in a program involved in food supply or utilization, farmland conservation or woodlot management. Apply to Student Financial Services by October 7 with a Financial Need Assessment Form (N.A.F.) ACCESS AWARD

*Donor(s):* **Doug MacDougald, D.V.M.**

*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:* 2 awards of \$1,000

**In-course Awards with Financial Need****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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Established by Dr. Allan Cawley**

*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

**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. Awarded in the Winter semester.

*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

**Bette Stephenson Accessibility Bursary [I3054]**

In recognition of the work of Dr. Bette Stephenson in supporting students with learning disabilities, the University of Guelph offers bursaries to students who have demonstrated financial need and who have a learning disability. These bursaries will be used to offset the costs of a required assessment, or the purchase of a computer that is required to support their learning needs. Apply to Student Financial Services, with a completed Financial Need Assessment Form (N.A.F.) by October 7. Awarded in the Winter semester.

*Donor(s):* **University of Guelph**

*Qualification(s):* Undergraduate students who have demonstrated financial need and who have a learning disability. Students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents.

*Amount:* 3 awards to a maximum 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. Awarded in the Winter semester. 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.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Burnbrae Farms**

*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

**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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Canadian Animal Health Institute**

*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 \$575

**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. Awarded in the Winter semester.

*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 by October 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Class of '72: 25th Reunion**

*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

**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. Awarded in the Winter semester. ACCESS AWARD. A number of awards ranging from \$500 to \$2,000

*Donor(s):* **Alumni and Friends of OVC**

*Qualification(s):* Undergraduate 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:* Several varies

**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. Distributed in the Winter semester.

*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. 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. Awarded in the Winter semester.

*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.

*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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Ross C. Croucher, OVC '50**

*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 OSOTF award (see General Statements on Awards).

*Amount:* 1 award of \$800

**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. Awarded in the Winter semester.

*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 \$300

<b>Elizabeth Burton Bursaries [I3503]</b>	
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. Awarded in the Winter semester. ACCESS AWARD. A number of awards totalling \$2,900.	
<i>Donor(s):</i>	<b>Mrs. Elizabeth Burton</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of up to \$2000
<b>Essex County Veterinary Association Bursary [I2529]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Essex County Veterinary Association</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$500
<b>Gloria Lemieux Bursaries [I2156]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Estate of Gloria Lemieux</b>
<i>Qualification(s):</i>	Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and demonstrated need of financial assistance.
<i>Amount:</i>	Several varying
<b>Grant and Muriel Crittenden Bursaries [I2018]</b>	
Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The estate of Grant and Muriel Crittenden</b>
<i>Qualification(s):</i>	Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.
<i>Amount:</i>	Several varies
<b>Grant Misener Bursaries [I2538]</b>	
Dr. Andrew Grant Misener (O.V.C.'38), alumnus of the University of Guelph, with the assistance of the Ontario government's OSOTF program, has established an endowment fund for bursaries to provide financial assistance to 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Dr. Andrew Grant Misener (OVC '38)</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several varies
<b>Gryphon Investment Council Bursaries [I3513]</b>	
Established by Gryphon Investment Counsel, with the assistance of the Ontario government's OSOTF program. Awarded in the Winter semester. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Gryphon Investment Council Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Guelph Compassionate Health Bursary [I3061]</b>	
This bursary has been established and approved by the Student Health and Dental Committee to assist students facing unforeseen health needs above and beyond the benefits offered through the mandatory University of Guelph student health plan. Submit a Financial Need Assessment Form (N.A.F.) accompanied by the physician recommendation, cost estimates and physician contact information to the Awards Officer, Student Financial Services. The application will be reviewed throughout the semester to handle emergencies immediately.	
<i>Donor(s):</i>	<b>Student Health and Dental Plan Reserve</b>
<i>Qualification(s):</i>	All currently registered students at the University of Guelph that are covered under the University of Guelph mandatory Student Health Plan. The student must require treatment for a condition not currently or completely covered by the Student Health Plan.
<i>Amount:</i>	Several varies to a maximum \$1,500
<b>Guelph Student Assistance Program [I3056]</b>	
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. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Undergraduate Students</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of varying amounts up to \$1,000
<b>Helen Davidson Memorial Bursary [I2509]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Established by Gladys M. Davidson</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	8 awards of \$1,000
<b>Hill's Bursary [I2511]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Hill's Pet Nutrition Canada Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	1 award of \$1,500
<b>Howard and Myrtle Rogers Bursaries [I3537]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>The Estate of Howard and Myrtle Rogers</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	10 up to \$2,000

**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):* Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.

*Amount:* Several awards of varying amounts

**International Student Bursaries [I3009]**

Mrs. Norma L. Valeriotte has made available a number of bursaries. Apply to the International Student Advisor.

*Donor(s):* **Mrs. Norma L. Valeriotte**

*Qualification(s):* Students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need.

*Amount:* Several 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. Awarded in the Winter semester.

*Donor(s):* **Family and friends of Irvine and Grace B.L.A.ck**

*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

**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. ACCESS AWARD

*Donor(s):* **The Rathlyn Foundation**

*Qualification(s):* Undergraduate students in the D.V.M. program, students registered in the Faculty of Graduate Studies and enrolled in a department of the Ontario Veterinary College, and undergraduate 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 of \$5,000

**Lesley Lewisohn Stewart Bursary [I2064]**

Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

*Donor(s):* **Mr. Neville Lewisohn**

*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

**Margaret Emma (Peggy) and Donald Alan Melton Bursaries [I2503]**

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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Established by Donald Alan Melton**

*Qualification(s):* Full-time undergraduate students in the D.V.M. program and to graduate students registered in the Faculty of Graduate Studies and enrolled in a department of the Ontario Veterinary College. Eligible undergraduate students must have completed Phase 1 of their program with satisfactory academic performance. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).

*Amount:* 4 awards of \$1,000

**Mary I. Whitelock Bursaries [I3524]**

Established by the estate of Mary I. Whitelock, a friend of the University, with the assistance of the Ontario government's OSOTF program, to assist 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Estate of Mary I. Whitelock**

*Qualification(s):* All undergraduate, graduate or O.A.C. diploma 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

**Maude Loretta Trapp Bursaries [I2099]**

Maude Loretta Trapp, a humanitarian and lover of animals has established this bursary for undergraduate veterinary students who are residents of North Western Ontario. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.

*Donor(s):* **The estate of Maude Loretta Trapp**

*Qualification(s):* Students enrolled in the D.V.M. program who are residents of North Western Ontario (whole district of Thunder Bay and all the territory west to the Manitoba border), who have a record of satisfactory academic performance and have demonstrated financial need.

*Amount:* Several varies

**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. Awarded in the Winter semester.

*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 Veterinary Medical Association Bursary [I2505]**

Established by the Ontario Veterinary Medical 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. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **Ontario Veterinary Medical Association**

*Qualification(s):* 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).

*Amount:* 1 award of \$500

**OVC '39 ACCESS Bursary [I2591]**

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 7. Awarded in the Winter semester. ACCESS AWARD

*Donor(s):* **OVC '39**

*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:* 1 award of \$1,000

**OVC '48 Bursary [I2116]**

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 7. Awarded in the Winter semester.

*Donor(s):* **Class of OVC '48**

*Qualification(s):* 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.

*Amount:* Several varies

<b>OVC '52 Bursary [I2143]</b>	
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 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>The Class of OVC '52</b>
<i>Qualification(s):</i>	Students enrolled full-time in the D.V.M. program with a record of satisfactory academic standing and the greatest demonstrated financial need.
<i>Amount:</i>	1 award of \$1,500

<b>OVC '55 Bursaries [I2508]</b>	
Established by the Class of O.V.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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>OVC '55</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	5 awards of \$500

<b>OVC'49 and Dr. Ray Cormack Bursaries [I2504]</b>	
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 7. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>OVC '49-Cormack Fund</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	5 awards of \$1,000

<b>Pearl and Percy Kaine Bursaries [I2500]</b>	
Pearl and Percy Kaine, Guelph landowners and dairy farmers who had an interest in horses, have provided financial assistance to veterinary students through the Pearl and Percy Kaine Bursaries 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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Pearl and Percy Kaine Bursaries</b>
<i>Qualification(s):</i>	One award will be given annually to one student in each of the four years of the D.V.M. program who has demonstrated the greatest financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	4 awards of \$2,500

<b>Pfizer Bursaries [I2506]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Pfizer Canada Inc.</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	3 awards of \$1,000

<b>Robert Auger Humanitarian Bursary [I3058]</b>	
This award, of up to \$500, has been established through the generosity of staff in the Office of Registrarial Services, family and friends of Robert 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 circumstances, to provide grocery, and textbook vouchers.	
<i>Donor(s):</i>	<b>Office of Registrarial Services</b>
<i>Qualification(s):</i>	Students who require assistance through this fund should apply in confidence to the Assistant Registrar, Financial Aid, Student Financial Services.
<i>Amount:</i>	Several awards of \$500

<b>Robinson Memorial Bursary [I2118]</b>	
Provided in memory of Dr. Gerry Robinson, a popular teacher and exemplary scientist in the Department of Biomedical Sciences at the Ontario Veterinary College (1957-1992) by family, friends and colleagues. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Mrs. Barbara Robinson</b>
<i>Qualification(s):</i>	Student enrolled in the D.V.M. program with a record of satisfactory academic performance and demonstrated financial need.
<i>Amount:</i>	Several varies

<b>Scotiabank Bursaries [I3532]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>Scotiabank</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	2 awards of \$1,500

<b>Sigmund Samuel Goodman Memorial Bursary [I2050]</b>	
Friends and family of Sigmund Samuel Goodman, humanist and lover of animals, have endowed funds for a memorial bursary. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Dr. Robert Bennett</b>
<i>Qualification(s):</i>	Students enrolled in the D.V.M. program with a satisfactory academic performance and a demonstrated need of financial assistance.
<i>Amount:</i>	Several varies

<b>Thibeault Bursaries [I2067]</b>	
Established by Dr. C. Thibeault, a former student of O.V.C. Apply with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by October 7. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>Dr. C. Thibeault</b>
<i>Qualification(s):</i>	Students enrolled in the D.V.M. program who have a record of satisfactory academic performance and have demonstrated financial need.
<i>Amount:</i>	Several varies

<b>University of Guelph Access Bursaries [I3522]</b>	
Provided by alumni and friends of the University, with the assistance of the Ontario government's OSOTF program, to support undergraduate, graduate or O.A.C. (Guelph) diploma 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. Awarded in the Winter semester. ACCESS AWARD. Variable amounts from \$500 to \$2,000	
<i>Donor(s):</i>	<b>Alumni and Friend of the University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of \$500, Several awards of \$2,000

<b>University of Guelph Alumni Association Access Bursaries [I3523]</b>	
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. Awarded in the Winter semester. ACCESS AWARD	
<i>Donor(s):</i>	<b>University of Guelph Alumni Association</b>
<i>Qualification(s):</i>	Full-time in-course students with demonstrated financial need. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	2 awards of \$1,000

<b>University of Guelph Child Care Bursaries [I3053]</b>	
In order to provide accessible child care to students with (a) child(ren), the University of Guelph offers 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. Awarded in the Winter semester. A number of awards of between \$500 and \$2,000.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Students, supporting (a) child(ren) who demonstrate greatest financial need, to offset the costs of child care. To be eligible, undergraduate students must be full-time (as defined by OSAP regulations) and Canadian citizens or permanent residents with demonstrated financial need.
<i>Amount:</i>	Several awards of up to \$2,000
<b>University of Guelph International Bursary [I3048]</b>	
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 Benny Quay, in the Centre of International Programs office by completing an International Student Financial Need Assessment Form (N.A.F.). These bursaries are awarded on an on-going basis.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Any International student registered in a degree program at the University of Guelph with a minimum registration of 1.50 course credits.
<i>Amount:</i>	Several varies
<b>University of Guelph Undergraduate In-Course Bursaries (MET-TR-UG) [I3037]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Ontario students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards ranging in value from \$100 to \$3,000
<b>University of Guelph Undergraduate In-Course Bursaries (NON OSAP TR) [I3047]</b>	
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. Awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	Undergraduate students registered for full-time studies (as defined by OSAP) in a degree program with demonstrated financial need and a minimum of 2.0 course credits completed.
<i>Amount:</i>	Several awards to a maximum of \$800
<b>University Police Bursaries [I3019]</b>	
The University Police have made available a number of bursaries. Apply to Student Financial Services with a completed Financial Need Assessment Form (N.A.F.) by October 7.	
<i>Donor(s):</i>	<b>The University Police</b>
<i>Qualification(s):</i>	Full-time undergraduate and graduate students who have financial need.
<i>Amount:</i>	Several of various amounts
<b>University Student Assistance Program [I3057]</b>	
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. Typically, awarded in the Winter semester.	
<i>Donor(s):</i>	<b>University of Guelph</b>
<i>Qualification(s):</i>	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).
<i>Amount:</i>	Several awards of various amounts to a maximum of \$1,000

## In-course Travel Grants

<b>Arthur D. Latornell Undergraduate Travel Grants [T0058]</b>	
An endowment fund established in memory of Arthur D. Latornell, O.A.C. '50, who had a life-long professional career in resource management and conservation and a special interest in helping young people. The funds are given to provide twenty-five travel grants. These travel grants are offered to assist students in attending conferences, courses, co-op student exchanges or study abroad programs in these areas. Students may receive this grant only once. Apply to Student Financial Services. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. Up to 80% of estimated travel costs to a maximum of \$1,000.	
<i>Donor(s):</i>	<b>The Estate of Arthur D. Latornell</b>
<i>Qualification(s):</i>	Students in semester 3 and above. Students must have at least a 70% average and a primary area of interest related to natural resources management, environmental science, conservation, soil science and/or rural development. Students will be asked to submit a one-page review of their travel experience, including the role the travel grant played, to the University after completion of the travel.
<i>Amount:</i>	several up to a maximum of \$1000
<b>Canadian Friends of the Hebrew University in Jerusalem Travel Bursary [T4532]</b>	
The Canadian Friends of the Hebrew University of Jerusalem, with the assistance of the Ontario government's OSOTF program, have established these travel scholarships to assist students study at the Hebrew University of Jerusalem. Apply by letter with a completed Financial Need Assessment Form (N.A.F.) to Student Financial Services by May 1. ACCESS AWARD. Up to three awards totalling \$7500.	
<i>Donor(s):</i>	<b>Canadian Friends of the Hebrew University in Jerusalem</b>
<i>Qualification(s):</i>	Undergraduate degree students in either the second or third year of study, Masters students in the first year of study, and Doctoral students in the first three years of study are eligible to be considered. Applicants must provide documentation that they have approval from the Hebrew University of Jerusalem (i) to take courses and (ii) for the period of the visit. Students must also arrange appropriate University of Guelph approvals for a "Letter of Permission" prior to applying. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	3 Awards with varying amounts
<b>OVC Alumni Association Travel Scholarship [T2044]</b>	
Presented by the O.V.C. Alumni Association to support summer work programs under the direction of a faculty member at another University. Applications must be submitted in writing to the O.V.C. Awards Committee before the Christmas break in Phase 3, with a reference from at least one O.V.C. instructor and a letter indicating that satisfactory arrangements have been made for the summer work.	
<i>Donor(s):</i>	<b>OVC Alumni Association</b>
<i>Qualification(s):</i>	Student who has completed Phase 2 of the D.V.M. program with high academic standing. The Awards Committee will consider the qualities of leadership, integrity, personality and the ability to communicate well. The recipient must indicate that arrangements have been made to work in the summer between Phases 3 and 4 under a faculty member at another University.
<i>Amount:</i>	1 award of \$1,500
<b>Richard and Sophia Hungerford Undergraduate Travel Scholarships [T4508]</b>	
The estate of Richard and Sophia Hungerford, with the assistance of the Ontario government's OSOTF program, has established an endowment to provide travel scholarships to undergraduate students with demonstrated financial need who wish to study in developing countries, or attend conferences on development. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel. ACCESS AWARD.	
<i>Donor(s):</i>	<b>The Estate of Richard Hungerford</b>
<i>Qualification(s):</i>	Registered undergraduate students with demonstrated financial need who have at least a 70% cumulative average in the last 2 semesters of full-time equivalent study are eligible. Additionally, students must meet the government-mandated terms for receipt of an OSOTF award (see General Statements on Awards).
<i>Amount:</i>	Several awards of varying amounts to a maximum of \$1,000

**University of Guelph Travel Scholarships [T0421]**

The University of Guelph, through the sale of Guelph London House, has established an endowment to provide travel scholarships to undergraduate and graduate students who wish to study outside of Canada but need financial support to do so. A total of \$35,000 is available in the fund. Apply to Student Financial Services with a description of the intended travel, an estimate of the travel costs and a completed Financial Need Assessment Form (N.A.F.) at least one month prior to departure. Deadline dates are June 1 for Fall travel, October 1 for Winter travel, and February 1 for Summer travel.

*Donor(s):* **University of Guelph**

*Qualification(s):* Registered undergraduate and graduate students that have completed 5.0 credits with demonstrated financial need who have a minimum 70% cumulative average in the last two semesters of full-time equivalent study are eligible to apply. The value of the award will depend on the assessed financial need. The scholarship can cover additional costs of travelling outside of Canada including: airfare, administrative costs, and differential costs of accommodation.

*Amount:* Several up to \$1,000

**Vetoquinol Travel Scholarship in Avian Medicine [T2163]**

Vetoquinol N-A Inc. established this award to support a D.V.M. student attending the annual Association of Avian Veterinarians Conference. Selection will be made based on the student's academic performance in Comparative Medicine (VETM\*4480), combined with the extent and quality of demonstrated interest and experience in avian medicine. Apply by letter, outlining interest and experience in avian medicine, and expected benefit of attendance at the conference, to the OVC Assistant Dean, Student Affairs, by January 15.

*Donor(s):* **Vetoquinol N- A Inc.**

*Qualification(s):* Full-time D.V.M. students who have completed Phase 3 and are planning on attending the annual Association of Avian Veterinarians Conference.

*Amount:* 1 award of \$1,000

**Vetoquinol Travel Scholarship in Bovine Reproduction [T2162]**

Vetoquinol N-A Inc. established this award to support a D.V.M. student attending the annual Society of Theriogenology Conference. Apply by letter, outlining interest and experience in bovine reproduction, and expected benefit of attendance at the conference, to the OVC Assistant Dean, Student Affairs, by January 15.

*Donor(s):* **Vetoquinol N- A Inc.**

*Qualification(s):* Full-time D.V.M. student planning to attend the annual Society of Theriogenology Conference

*Amount:* 1 award of \$1,000

## Other Forms of Financial Assistance

### Independent Study - O.A.C.

#### Vera Bezerey Memorial Prize in Communications

Established by the Ontario Diploma in Horticulture Graduates Association in memory of Vera Bezerey, the first female ODH graduate. Apply to Independent Study/O.A.C. ACCESS by letter on or before April 1.

*Qualification(s):* Graduating adult learner in the ODH program who, during the course of her or his studies, has demonstrably contributed to the public profile and understanding of horticulture and landscaping, and has a minimum "A" standing (average) at graduation. The prize recognizes skills in independent business communications - including public relations, marketing, and services/product promotion via new media/multimedia creation, public speaking, or print, audio and video publicity/communication.

*Amount:* One award of \$450

### Open Learning program Awards

#### Open Learning Bursaries

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, online, through the Office of Open Learning web site at [www.open.uoguelph.ca/bursary](http://www.open.uoguelph.ca/bursary) by June 30 for consideration for Fall, Winter, and/or Spring semesters of study.

*Qualification(s):* Canadian citizens or permanent residents with the greatest financial need.

*Amount:* Two awards of \$250

#### Prof. H.J. Malik Statistics Prize

Provided in honour of H.J. Malik, Professor Emeritus in the Department of Mathematics and Statistics, by family, colleagues and friends. Application not required.

*Qualification(s):* 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.

*Amount:* One award of \$150

### Ontario Student Assistance Program (OSAP)

Students who meet the Ontario residence requirements and who require financial assistance to attend the University, should apply for the Ontario Student Assistance Program (OSAP) online at <http://osap.gov.on.ca>. Students should refer to the OSAP website to review the OSAP Program Information Guide for details on program policies and procedures. Students who are bonafide residents of other provinces should apply to their home province for financial assistance.

### Loans - All Colleges

#### International Student Loan Fund

Mrs. Norma L. Valeriotte has made available a loan fund for students who are citizens of Third World countries, as defined by the United Nations, who are registered in a degree or diploma program and who demonstrate financial need. Apply to the International Student Advisor.

#### Uniroyal Ltd. Fund

A fund was established by Uniroyal Limited in 1972 to provide for loans to students who have successfully completed one year of post-secondary education and who have a demonstrated interest in a career in either industry or education.

#### University of Guelph Fund

The Board of Governors established in 1980 a loan fund of \$25,000 to assist needy students to meet academic expenses not covered from normal financial resources. Enquiries should be made at Student Financial Services, Level 3, University Centre. Loans may be interest free to the due date which is not to exceed 30 days beyond conclusion of the semester. Interest will be charged on any balance which remains outstanding beyond the maturity date, at the rate of interest in effect for the year in which the loan is made. The rate will be established at the time the loan is issued and will agree with the Canadian Chartered Banks' prime lending rate in effect at that time.

### Loans - Ontario Agricultural College

Students enrolled in programs of the Ontario Agricultural College who are in need of financial assistance, may make application to the Associate Registrar, Student Financial Services for a loan from one of the below-mentioned funds. Loans may be interest free until the maturity date (not later than 6 months following completion of the academic year in which the loan is received). Interest will be charged on any balance which remains outstanding beyond the maturity date, at the rate of interest in effect for the year in which

the loan is made. The rate will be established at the time the loan is issued and will agree with the Canadian Chartered Banks' prime lending rate in effect at that time. O.A.C. students should also check the availability of bursaries for which they may be eligible in the awards section for each degree program.

#### Mason Fund

In memory of the late H.C. Mason, a loan fund for freshman students in the Ontario Agricultural College has been established by F.W. Bray of Hamilton.

#### Massey Fund

Established in 1904 by W.H. Massey of Toronto for students enrolled in programs of the Ontario Agricultural College who are in need of financial assistance.

#### Quinn Memorial Loan Fund and Bursaries

In memory of Ronald J. Quinn, O.A.C.'35, Mrs. Helen Farquhar Quinn, O.A.C.'35, of London, Ontario, has established a loan fund from which O.A.C. students who are citizens of Third World countries as defined by the United Nations may borrow funds. Preference will be given to students who indicate an intention to return to their country of origin following graduation. Interest accumulated on the loan fund will be used to provide bursaries to students from Third World countries. Apply to the International Student Advisor.

#### Dr. J.L. Tennant Fund

Established in 1964 by the late Mabel Elizabeth Tennant in memory of her husband the late Dr. J.L. Tennant, this fund is restricted to students proceeding to an undergraduate or graduate degree in Agricultural Economics, Agricultural Business or Resource Economics and Rural Development. Regulations regarding this fund differ from the above funds in that the interest free period and the repayment period may be extended under certain circumstances. The interest rate is established at the time the loan is made, to agree with the rate in effect at that time for repayment of a C.S.L. through a chartered bank. Application is to be made to the Department of Agricultural Economics and Business.

## X. Degree Programs

### Specializations and Their Degrees

Subject Area		Honours			General	Co-op
		Major	Minor	Area of Emphasis		
Agricultural Business	AGBU	BComm				BComm
Agricultural Economics	AGEC	BA BSAG				
Agriculture	AGRS	BSAG				
Agroecosystem Management	AGMN	BSAG				
Agronomy	AGRO	BSAG				
Animal Biology	ABIO	BSC				
Animal Science	ANSC	BSAG				
Anthropology	ANTH	BA	BA BAS		BA	
Applied Human Nutrition	AHN	BASc				
Applied Mathematics & Statistics	APMS					BSC
Applied Pharmaceutical Chemistry	APPC					BSTC
Art History	ARTH	BA	BA BAS			
Arts and Sciences		BAS				
Atmospheric Resources	AR			BSES		
Art Theory and Criticism	ATC		BA BAS			
Biochemistry	BIOC	BSC	BAS BSC			BSC
Biological Chemistry	BCHM	BSC				
Biological Engineering	BENG	BSEN				BSEN
Biological Science	BIOS	BSC			BSC	
Biology	BIOL		BAS BSC			
Bio-Medical Science	BIOM	BSC				
Biomedical Toxicology	BTOX	BSC				BSC
Biophysical Environment & Development	BED			BAH.ID		
Biophysics	BIOP	BSC				BSC
Biotechnology	BIOT		BAS BSC			
Biotic Systems	BS			BSES		
Business Administration	BADM		BA BAS BSC			
Chemical Physics	CHPY	BSC				BSC
Chemistry	CHEM	BSC	BAS BSC			BSC
Child, Youth and Family	CYF	BASC				BASC
Classical Languages	CLAL	BA	BA BAS			
Classical Studies	CLAS	BA	BA BAS			
Cognitive Neuropsychology	CGNR		BA BAS			
Computing		BCOMP	BCOMP		BCOMP	BCOMP
Computing & Information Science	CIS	BA BSC	BA BAS BSC		BA	BA BSC
Criminal Justice & Public Policy	CJPP	BA	BA BAS			
Crop Ecology	CE			BSES		

Developmental Psychology	DPSY		BA BAS			
Development & Stewardship	DS			BSES		
Earth & Atmospheric Science	EAAS	BSES				BSES
Earth Surface Science	ESS	BSC				
Ecology	ECOL	BSC BSES	BAS BSC			BSES
Economic & Business Development	EBD			BAH.ID		
Economics	ECON	BA	BA BAS		BA	BA
Educational Psychology	EPSY		BA BAS			
Engineering Systems & Computing	ESC	BSES				BSES
English	ENGL	BA	BA BAS		BA	
Environmental Administration	EA			BSES		
Environmental Biology	ENVB	BSc				
Environmental Degradation	ED			BSES		
Environmental Economics & Policy	EEP	BSES				BSES
Environmental Engineering	ENVE	BSEN	BSEN			BSEN
Environmental Geography	ENVG	BSES				BSES
Environmental Impact Assessment	EIA			BSES		
Environmental Management in the U.S.	EMUS			BSES		
Environmental Management	ENVM	BBRM				
Environmental Monitoring & Analysis	EMA	BSES				BSES
Environmental Protection	ENVP	BSES				BSES
Environmental Quality	EQ			BSCH.ENVB		
Environmental Studies	ENVS		BA BAS			
Environmental Toxicology	ETOX	BSC				BSC
Environmetrics	ENVM	BSES				BSES
European Culture & Civilization	ECC			BAH.EURS		
European Business Studies	EBS			BAH.EURS		
European Studies	EURS	BA				
Experimental Ecology	EECO			BSCH.ECOL		
Family & Child Studies	FCS		BA BAS			
Finance	FIN			BCOMM		
Food Engineering	FENG		BSEN			
Food Science	FOOD	BSC	BAS BSC			BSC
Forest Science	FORS		BAS BSC			
French Studies	FREN	BA	BA BAS		BA	
Functional Foods & Nutraceuticals	FFAN		BAS BSC			
Gender and Development	GAD			BAH.ID		
General Ecology	GECO			BSCH.ECOL		
Genetics	GEN		BAS			
GIS & Environmental Analysis	GIS		BAS BSC			
Geography	GEOG	BA	BA BAS		BA	
Geology	GEOL		BAS BSC			
German	GERM		BA BAS			

Gerontology	GERN	BASC				BASC
Historical Perspective in Development	HPD			BAH.ID		
History	HIST	BA	BA BAS		BA	
Horticultural Science	HORT	BSAG				
Horticulture Management	HM	BBRM				
Hotel & Food Administration	HAFA	BComm				BComm
Human Kinetics	HK	BSC				
Human Resources Management	HRM	BComm				
Individual Studies	IS	BA				
Industry	IND			BCOMM		
Information Systems & Human Behaviour	ISHB	BA				
International Development	ID	BA	BA BAS		BA	
Interpretive Ecology	IE			BSCH.ECOL		
Italian	ITAL		BA BAS			
Land Resources	LR			BSES		
Landscape Architecture		BLA				
Landscape Ecology	LE			BSES		
Latin American Studies	LAS			BAH.ID		
Marine & Freshwater Biology	MFB	BSC				
Management Economics in Industry & Finance	MEIF	BComm				BComm
Marketing Management	MKMN	BComm	BA BAS			BComm
Mathematical Economics	MAEC	BA				
Mathematical Modelling & Risk Assessment	MMRA			BSES		
Mathematical Science	MSCI		BAS BSC			
Mathematics	MATH	BA BSC	BA BAS BSC		BA	
Microbiology	MICR	BSC	BAS BSC			BSC
Molecular Biology & Genetics	MBG	BSC	BSC			
Museum Studies	MS		BA BAS			
Music	MUSC	BA	BA BAS		BA	
Natural Resources Management	NRM	BSES				BSES
Neuroscience	NEUR		BAS BSC			
Nutritional Science	NSCI		BAS BSC			
Nutritional & Nutraceutical Sciences	NANS	BSC				
Organic Agriculture	OAGR	BSAG				
Organizational Behaviour	OBEH		BA BAS			
Philosophy	PHIL	BA	BA BAS		BA	
Physical Science	PSCI	BSC			BSC	
Physics	PHYS	BSC	BAS BSC			BSC
Physics & Technology	PHTC					BSTC
Plant Biology	PBIO	BSC	BAS BSC			
Plant Biotechnology	PBTC	BSC				
Plant Protection	PP			BSCH.ENVB		
Political Economy & Administrative Change	PEAC			BAH.ID		

Political Science	POLS	BA	BA BAS		BA	
Psychology	PSYC	BA BSC	BSC			BA
Public Management	PMGT	BComm				BComm
Real Estate & Housing	REH	BComm				BComm
Resource Conservation	RC			BSCH.ECOL		
Rural & Agricultural Development	RAD			BAH.ID		
Rural & Development Sociology	RDS	BA				
Rural Extension Studies	RES		BA BAS			
Social Psychology	SPSY		BA BAS			
Sociology	SOC	BA	BA BAS		BA	
Spanish	SPAN	BA	BA BAS		BA	
Statistics	STAT	BA BSC	BA BAS BSC		BA	
Studio Art	SART	BA	BA BAS			
Theatre Studies	THST	BA	BA BAS		BA	
Theoretical Physics	THPY	BSC				
Tourism Management	TMGT	BComm				
Veterinary Medicine		DVM				
Visual Arts of the Americas	VAA		BA BAS			
Water Resources	WR			BSES		
Water Resources Engineering	WRE	BSEN				BSEN
Wild Life Biology	WLB	BSC				
Women's Studies	WMST	BA	BA BAS		BA	
Zoology	ZOO	BSC	BAS BSC			

## 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:

Applied Human Nutrition  
Child, Youth and Family  
Gerontology

Co-operative Education is available in the following programs:

Child, Youth and Family  
Gerontology

Given the professional and applied character of the program, there are no minors associated with the degree. 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 Human Development 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. Students in the B.A.Sc. program may repeat any failed course only once. Failure to successfully complete a required (core) credit on the second attempt results in the student not being permitted to continue in his/her major and/or program.

### 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 or Continue on Probation

### 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 courses 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.

## 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.

### The B.A.Sc. Applied Human Nutrition program is accredited by the Dietitians of Canada.

All students in the Applied Human Nutrition major must include the core of 14.00 required and 1.50 restricted electives in the minimum of 20.00 passed credits. Students normally register for courses according to the semesters indicated below for Fall and Winter sequencing.

Those students wishing to compete for admission to a post-graduate dietetic internship will be assisted by departmental advisors in the selection of courses that will meet the academic requirement of the Dietitians of Canada and the College of Dietitians of Ontario for eligibility for internship and/or membership.

Successful completion of the requirements will allow students to compete for a limited number of dietetic internship positions. Most graduates completing dietetic internships are employed in hospitals and other health care agencies such as community health centres and long-term care facilities. Others find employment in a wider range of vocations including those associated with health and education in the government or private sectors, or with the food industry. Still others proceed to graduate study in fields such as nutrition, public health nutrition, medicine or education.

### Major

#### Semester 1

CHEM*1040	[0.50]	General Chemistry I
HTM*2700	[0.50]	Introductory Foods
MICR*1020	[0.50]	Fundamentals of Applied Microbiology
PSYC*1200	[0.50]	Dynamics of Behaviour
SOC*1100	[0.50]	Sociology

Note: Students who do not have standing in OAC Biology, or equivalent, must substitute BIOL\*1020 for SOC\*1100 in Semester 1. Semester 2 must include SOC\*1100 if this substitution is made.

#### Semester 2

CHEM*1050	[0.50]	General Chemistry II
FRHD*1020	[0.50]	Couple and Family Relationships
NUTR*1010	[0.50]	Nutrition and Society
PSYC*1100	[0.50]	Principles of Behaviour

0.50 electives

#### Semester 3

BIOC*2580	[0.50]	Introductory Biochemistry
HTM*2030	[0.50]	Control Systems in the Hospitality and Tourism Industry
NUTR*2050	[0.50]	Family and Community Nutrition
STAT*2080	[0.50]	Introductory Applied Statistics I

One of:

CIS*1200	[0.50]	Introduction to Computing
MCS*2020	[0.50]	Information Management

Note: HTM\*2030 may be taken in Semester 4.

#### Semester 4

BIOC*3560	[0.50]	Structure and Function in Biochemistry
NUTR*3210	[0.50]	Fundamentals of Nutrition
STAT*2090	[0.50]	Introductory Applied Statistics II

1.00 electives or restricted electives

#### Semester 5\*

BIOM*3100	[0.50]	Mammalian Physiology I
FRHD*3070	[0.50]	Research Methods - Family Studies

1.50 electives or restricted electives

\* students planning to apply for a dietetic internship must take HTM\*3090 in Semester 5 in place of elective or restricted elective

#### Semester 6

BIOM*3110	[0.50]	Mammalian Physiology II
FRHD*3400	[0.50]	Communication and Counselling Skills
HTM*3000	[0.50]	Human Resources Management
NUTR*3040	[0.50]	Clinical Nutrition I

0.50 electives or restricted electives

Note: HTM\*3000 may be taken in Semester 7.

#### Semester 7

NUTR*4010	[0.75]	Nutritional Assessment
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NUTR*4040	[0.75]	Clinical Nutrition II
NUTR*4070	[0.50]	Nutrition Education

0.50 electives or restricted electives

### Semester 8

NUTR*4900	[0.50]	Selected Topics in Human Nutrition
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2.00 electives or restricted electives

Note: With approval from the instructor, students may substitute NUTR\*4810 and NUTR\*4910 for NUTR\*4900.

### Restricted Electives

In addition to the 14.00 required credits listed above, 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*2410	[0.50]	Introduction to Food Processing
FOOD*2420	[0.50]	Introduction to Food Microbiology
FOOD*3010	[0.50]	Food Chemistry
FOOD*3020	[0.50]	Food Chemistry Laboratory
FOOD*3230	[0.75]	Food Microbiology
FOOD*3700	[0.50]	Sensory Evaluation of Foods
HTM*2740	[0.50]	Cultural Aspects of Food
HTM*3780	[0.50]	Economics of Food Usage

### Electives

There are 4.50 electives throughout the major which may be fulfilled by electing courses in any subject provided that the student has the prerequisite courses and can schedule them. Some electives and restricted elective courses are intended to contribute to a liberal education, while others permit students to work toward specific academic and career goals. Departmental advisors will assist students in selection of courses that will meet the requirements of the Dietitians of Canada for eligibility for Internship and/or membership, and when requested, can assist in selection of electives to complement the core requirements.

Courses in different departments which complement the major and which may be taken as electives include:

AGR*1250	[0.50]	Agrifood System Trends & Issues
MBG*1000	[0.50]	Genetics and Society
MCS*1000	[0.50]	Introductory Marketing
NUTR*3330	[0.50]	Micronutrients, Phytochemicals and Health
NUTR*4200	[0.50]	Nutrition and Immune Function
NUTR*4210	[0.50]	Nutrition, Exercise and Energy Metabolism
NUTR*4850	[0.50]	Field Experience in Nutrition Education
PHIL*2030	[0.50]	Philosophy of Medicine

## 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 graduate as 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. 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 14.50 required credits and 0.50 restricted electives to a minimum of 20.00 passed 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 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 who register for Summer semesters and other students for whom the semester offerings present difficulty

may, where they have the approval of their departmental advisor, take some courses in alternative semesters.

## Major

### Semester 1

MBG*1000	[0.50]	Genetics and Society
PSYC*1200	[0.50]	Dynamics of Behaviour

One of:

ANTH*1150	[0.50]	Introduction to Anthropology
SOC*1100	[0.50]	Sociology

One of:

ENGL*1200	[0.50]	Reading the Contemporary World
FREN*1200	[0.50]	French Language I

0.50 electives

Note: BIOL\*1020 must be taken in Semester 1 if the student does not have OAC Biology or equivalent.

### Semester 2

FRHD*1020	[0.50]	Couple and Family Relationships
FRHD*2260	[0.50]	Infant Development
NUTR*1010	[0.50]	Nutrition and Society
PSYC*1100	[0.50]	Principles of Behaviour

0.50 electives

### Semester 3

BIOM*2000	[0.50]	Concepts of Physiology
FRHD*2100	[0.50]	Development of Human Sexuality
FRHD*2270	[0.50]	Development in Early and Middle Childhood
STAT*2080	[0.50]	Introductory Applied Statistics I

0.50 electives

### Semester 4

FRHD*2060	[0.50]	Adult Development and Aging
FRHD*2110	[0.50]	Exceptional Children and Youth
FRHD*2280	[0.50]	Adolescent Development
STAT*2090	[0.50]	Introductory Applied Statistics II

One of:

FRHD*2040	[0.50]	Principles of Program Design for Children
FRHD*2300	[0.50]	Principles of Program Design for Youth

### Semester 5

FRHD*3040	[0.50]	Parenting: Research and Applications
FRHD*3070	[0.50]	Research Methods - Family Studies
FRHD*3150	[0.50]	Strategies for Behaviour Change
FRHD*3200	[1.00]	Practicum - Child, Youth and Family I

### Semester 6

FRHD*3120	[0.50]	Families in Canadian Context
FRHD*3180	[0.50]	Observation and Assessment
FRHD*3400	[0.50]	Communication and Counselling Skills

1.00 electives

### Semester 7

FRHD*4170	[1.00]	Practicum--Child, Youth and Family II
FRHD*4310	[0.50]	Professional Issues

1.00 electives or restricted electives

### Semester 8

FRHD*4320	[0.50]	Social Policies for Children, Youth and Families
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2.00 electives or restricted electives

### Restricted Electives

In addition to the 14.50 required credits, 0.50 must be taken from the Department of Family Relations and Applied Nutrition at the 4000 level.

### Electives - Recommended and Program Options

#### Child and Youth Services

Students who intend to pursue a career in child and youth services may wish to choose electives from the following list:

FRHD*3090	[0.50]	Child and Family Poverty
FRHD*3190	[0.50]	Administration of Programs for Children and Youth
FRHD*4020	[0.50]	Family Theory
FRHD*4180	[0.50]	Assessment and Intervention
FRHD*4200	[0.50]	Issues in Human Sexuality
FRHD*4400	[0.50]	Youth, Risk and Resilience
FRHD*4810	[0.50]	Thesis I
FRHD*4910	[1.00]	Thesis II
NUTR*2050	[0.50]	Family and Community Nutrition
PSYC*3440	[0.50]	Cognitive Development
PSYC*3450	[0.50]	Social and Personality Development
PSYC*3710	[0.50]	Psychology of Learning Difficulties and Disabilities I
PSYC*3720	[0.50]	Psychology of Learning Difficulties and Disabilities II
PSYC*3850	[0.50]	Intellectual Disabilities

REXT*3100	[0.50]	Teaching and Learning in Non-Formal Education
SOAN*2290	[0.50]	Identities and Cultural Diversity
SOC*1500	[0.50]	Crime and Criminal Justice
SOC*2070	[0.50]	Social Deviance
SOC*3040	[0.50]	Sociology of Social Welfare
SOC*3710	[0.50]	Young Offenders

**Early Childhood Education**

Students who intend to pursue a career in early childhood education may wish to choose electives from the following list:

DRMA*2400	[0.50]	Theatre for Young Audiences
ENGL*2740	[0.50]	Children's Literature
FRHD*3090	[0.50]	Child and Family Poverty
FRHD*3190	[0.50]	Administration of Programs for Children and Youth
FRHD*4180	[0.50]	Assessment and Intervention
FRHD*4210	[0.50]	Senior Seminar in Early Education and Care
FRHD*4810	[0.50]	Thesis I
FRHD*4910	[1.00]	Thesis II
NUTR*2050	[0.50]	Family and Community Nutrition
PSYC*3710	[0.50]	Psychology of Learning Difficulties and Disabilities I
PSYC*3720	[0.50]	Psychology of Learning Difficulties and Disabilities II
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 an additional year of 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.

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.**

All students in the Child, Youth and Family Co-op major must include the following core of 13.5 required credits and 0.50 restricted electives to a minimum of 20.00 passed credits.

The first four semesters are as for the students in the regular program. Students in the co-op program must also complete COOP\*1100 in the third academic semester. Thereafter the schedule is as follows:

**Semester 1 - Fall**

MBG*1000	[0.50]	Genetics and Society
PSYC*1200	[0.50]	Dynamics of Behaviour

One of:

ANTH*1150	[0.50]	Introduction to Anthropology
SOC*1100	[0.50]	Sociology

One of:

ENGL*1200	[0.50]	Reading the Contemporary World
FREN*1200	[0.50]	French Language I

0.50 electives

Note: BIOL\*1020 must be taken in Semester 1 if the student does not have OAC Biology or equivalent.

**Semester 2 - Winter**

FRHD*1020	[0.50]	Couple and Family Relationships
FRHD*2260	[0.50]	Infant Development
NUTR*1010	[0.50]	Nutrition and Society
PSYC*1100	[0.50]	Principles of Behaviour

0.50 electives

**Semester 3 - Fall**

BIOM*2000	[0.50]	Concepts of Physiology
FRHD*2060	[0.50]	Adult Development and Aging
FRHD*2100	[0.50]	Development of Human Sexuality
FRHD*2270	[0.50]	Development in Early and Middle Childhood
STAT*2080	[0.50]	Introductory Applied Statistics I

**Semester 4 - Winter**

FRHD*2110	[0.50]	Exceptional Children and Youth
FRHD*2280	[0.50]	Adolescent Development
FRHD*3120	[0.50]	Families in Canadian Context
STAT*2090	[0.50]	Introductory Applied Statistics II

One of:

FRHD*2040	[0.50]	Principles of Program Design for Children
FRHD*2300	[0.50]	Principles of Program Design for Youth

**Summer Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

FRHD*3150	[0.50]	Strategies for Behaviour Change
FRHD*3180	[0.50]	Observation and Assessment
FRHD*3200	[1.00]	Practicum - Child, Youth and Family I
FRHD*4320	[0.50]	Social Policies for Children, Youth and Families

**Semester 6 - Summer**

FRHD*3400	[0.50]	Communication and Counselling Skills
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2.00 electives

**Semester 7 - Fall**

FRHD*3040	[0.50]	Parenting: Research and Applications
FRHD*3070	[0.50]	Research Methods - Family Studies
FRHD*4310	[0.50]	Professional Issues

1.00 electives or restricted electives

**Winter Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 8 - Summer**

2.50 electives

**Restricted Electives**

0.50 restricted electives at the 4000 level.

**Gerontology (GERN)****Department of Family Relations and Applied Nutrition, College of Social and Applied Human Sciences.**

The Gerontology major is designed to provide students with an appreciation of the aged and the aging experience from social, psychological, and biological perspectives. The major places this study within the broader framework of life span human development and dynamics of functioning in a variety of social contexts. A focus on basic knowledge of aging as well as the application of that knowledge is reflected in required courses and suggested electives.

Students enrolled in the Gerontology major study aging within the perspective of the family. This approach provides the student with a broad, applied social science education as well as a fully integrated package of aging related courses. Students graduate with a degree leading to a variety of professional career opportunities in the human service, education, mental health, life skills support and counselling, and social policy fields. Our graduates also may pursue graduate study in family studies, human development, or one of the base social science disciplines. All students in the Gerontology Major must complete a minimum of 20.00 credits including the core of 14.50 required credits as outlined in the Schedule of Studies. In addition to these core requirements, there are many courses in various departments throughout the University which may be taken as electives.

**Major****Semester 1**

COST*1800	[0.50]	Housing and Community Planning
FRHD*1010	[0.50]	Human Development
PSYC*1200	[0.50]	Dynamics of Behaviour
SOC*1100	[0.50]	Sociology

One of:

ENGL*1200	[0.50]	Reading the Contemporary World
FREN*1200	[0.50]	French Language I

**Semester 2**

FRHD*1020	[0.50]	Couple and Family Relationships
FRHD*2060	[0.50]	Adult Development and Aging
NUTR*1010	[0.50]	Nutrition and Society
PSYC*1100	[0.50]	Principles of Behaviour

0.50 electives\*

\* elective in Semester 2 must be BIOL\*1020 if the student does not have standing in OAC

Biology or equivalent

### Semester 3

NUTR*2050	[0.50]	Family and Community Nutrition
POLS*1400	[0.50]	Issues in Canadian Politics
STAT*2080	[0.50]	Introductory Applied Statistics I

One of:

BIOM*2000	[0.50]	Concepts of Physiology
MBG*1000	[0.50]	Genetics and Society
PSYC*2410	[0.50]	Behavioural Neuroscience I

0.50 electives

### Semester 4

STAT*2090	[0.50]	Introductory Applied Statistics II
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One of:

CIS*1000	[0.50]	Introduction to Computer Applications
CIS*1200	[0.50]	Introduction to Computing
MCS*2020	[0.50]	Information Management

1.50 electives

### Semester 5

FRHD*3060	[0.50]	Principles of Social Gerontology
FRHD*3070	[0.50]	Research Methods - Family Studies
FRHD*3400	[0.50]	Communication and Counselling Skills

1.00 electives

### Semester 6

FRHD*3120	[0.50]	Families in Canadian Context
HTM*2200	[0.50]	Organizational Behaviour I
HTM*3000	[0.50]	Human Resources Management

1.00 electives

### Semester 7

FRHD*4061	[1.00]	Family and Community: Field Placement
FRHD*4160	[0.50]	Family Relations in Gerontology
FRHD*4190	[0.50]	Assessment in Gerontology
FRHD*4250	[0.50]	Aging and Health

### Semester 8

FRHD*4062	[1.00]	Family and Community: Field Placement
FRHD*4260	[0.50]	Social Policy and Gerontology

1.00 electives

## Gerontology (Co-op) (GERN:C)

**Department of Family Relations and Applied Nutrition, College of Social and Applied Human Sciences.**

Students in the Co-op program must also complete COOP\*1100 in the second semester.

### Summer Semester

COOP*1000	[0.00]	Co-op Work Term I
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### Semester 5 - Fall

FRHD*3060	[0.50]	Principles of Social Gerontology
FRHD*3070	[0.50]	Research Methods - Family Studies

1.50 electives

### Winter Semester

COOP*2000	[0.00]	Co-op Work Term II
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### Semester 6 - Summer

FRHD*3400	[0.50]	Communication and Counselling Skills
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2.00 electives

### Fall Semester

COOP*3000	[0.00]	Co-op Work Term III
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### Semester 7 - Winter

FRHD*3120	[0.50]	Families in Canadian Context
FRHD*4260	[0.50]	Social Policy and Gerontology
HTM*2200	[0.50]	Organizational Behaviour I
HTM*3000	[0.50]	Human Resources Management

0.50 electives

### Semester 8 - Fall

FRHD*4160	[0.50]	Family Relations in Gerontology
FRHD*4190	[0.50]	Assessment in Gerontology
FRHD*4250	[0.50]	Aging and Health

1.00 electives

## Restricted Electives and Electives

As for the regular program.

## Bachelor of Arts (B.A.)

The University of Guelph offers general and honours 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.**

In fulfilling distribution requirements a) and b) students must in semester 1 choose 2 courses from 2 different schools or departments in the College of Arts and 2 courses from 2 of the following departments in the College of Social and Applied Human Sciences: Economics, Geography, Political Science, Psychology, Sociology and Anthropology.

Students entering the B.A. program with advanced standing must complete the distribution requirements a) and b) as soon as possible after entrance to the program. Requirement c) need not be completed immediately but is a graduation requirement.

Note: Courses taken to satisfy the distribution requirements may also be counted toward a specialization in the general or honours program.

### 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 Computing and Information Science, 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 honours 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.

The distribution requirement of 8 courses (minimum 4.00 credits) is as follows:

- A. A minimum of 1.50 credits over at least 2 different subject areas in the College of Arts:

ARTH Art History  
CLAS Classical Studies  
ENGL English  
EURO European Studies  
FREN French Studies  
GERM German Studies  
GREK Greek  
HIST History

HUMN Humanities  
ITAL Italian Studies  
LAT Latin  
LING Linguistics  
MUSC Music  
PHIL Philosophy  
SART Studio Art  
SPAN Spanish Studies  
THST Theatre Studies  
WMST Women's Studies

- B. A minimum of 1.50 credits over at least two of the following subject areas in the College of Social and Applied Human 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

- C. 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 OAC credit in a specific area):

BIOL*1020	[0.50]	Introduction to Biology
BIOL*1120	[0.50]	Environment and Human Health
BIOM*2000	[0.50]	Concepts of Physiology
BOT*1200	[0.50]	Plants and Human Use
CHEM*1060	[0.50]	Introductory Chemistry
CHEM*1100	[0.50]	Chemistry Today
CIS*1000	[0.50]	Introduction to Computer Applications
ENVB*2210	[0.50]	Introductory Apiculture
GEOG*1350	[0.50]	Earth: Hazards and Global Change
GEOL*1100	[0.50]	Principles of Geology
MATH*1050	[0.50]	Introduction to Mathematical Modeling
MBG*1000	[0.50]	Genetics and Society
MCS*2020	[0.50]	Information Management
MET*1000	[0.50]	The Atmospheric Environment
MICR*1010	[0.50]	The Microbial World
PHYS*1600	[0.50]	Contemporary Astronomy
PHYS*1810	[0.50]	Physics of Music
SOIL*2010	[0.50]	Soil Science
ZOO*1500	[0.50]	Humans in the Natural World - a Zoological Perspective

Courses available for students with adequate preparation (e.g. Grade 12 in the discipline or its equivalent):

BIOL*1030	[0.50]	Biology I
BIOL*1040	[0.50]	Biology II
CHEM*1040	[0.50]	General Chemistry I
CIS*1XXX	[0.50]	Any CIS course at the 1000 level
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
HK*2XXX	[0.00]	Any HK course at the 2000 level
MATH*1XXX	[0.00]	Any MATH course at the 1000 level
MET*2030	[0.50]	Meteorology and Climatology
MUSC*1090	[0.50]	Physics of Music
PHYS*1XXX	[0.00]	Any PHYS course at the 1000 level
STAT*2XXX	[0.00]	Any STAT course at the 2000 level

#### Double Counting of Courses

A maximum of 50 percent of the courses in a second major or minor may be courses taken in fulfillment of the first major where required courses are the same. Double counting is not allowed in the General Program.

#### 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:

- earn 15.00 credits. These must include courses that fulfill the distribution requirements (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 credits requirement.  
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), the Department of Computing and Information Science, or the Department of Mathematics and Statistics.
- 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:

- earn 20.00 credits. These must include courses that fulfill the distribution requirements (see below), 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.
- 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.
- 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.

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.

Honours B.A. students, except those doing a major in Computing and Information Science, Mathematics or Statistics, must take a minimum of 12.00 credits from either or both of the departments in the College of Arts and the departments of Economics, Geography, Political Science, Psychology, Sociology and Anthropology (in the College of Social and Applied Human Sciences).

### Semester One Requirements

Students in the General and Honours Programs must take:

#### Semester 1

1.00 credits from the following:

Art History - ARTH\*1220, ARTH\*1510

Classical Studies - CLAS\*1000

English - ENGL\*1080, ENGL\*1200

European Studies - EURO\*1050, EURO\*1200

French Studies - FREN\*1000, FREN\*1200

German Studies - GERM\*1100, GERM\*1110, GERM\*2490 (OAC Required)

Greek - GREK\*1100

History - HIST\*1010, HIST\*1150, HIST\*1250

Italian Studies - ITAL\*1060

Latin - LAT\*1100

Music - MUSC\*1060, MUSC\*1180, MUSC\*1500

Philosophy - PHIL\*1000, PHIL\*1010, PHIL\*1050

Studio Art - SART\*1050, SART\*1060

Spanish Studies - SPAN\*1100, SPAN\*1110

Theatre Studies - THST\*1040, THST\*1200

Women's Studies - WMST\*1000

PLUS

1.00 credits from the following:

Anthropology - ANTH\*1150

Economics - ECON\*1050

Geography - GEOG\*1200, GEOG\*1220, GEOG\*1300

Political Science - POLS\*1150, POLS\*1400, POLS\*1500

Psychology - PSYC\*1100, PSYC\*1200

Sociology - SOC\*1100, SOC\*1500

Women's Studies - WMST\*1000

### 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 departmental advisor or the Director of the School of Languages and Literatures.

### Special Study Option

#### London Study Semester

A special program of studies designed to make use of the uniquely rich resources of London, England, is offered as a regular part of the B.A. program every Fall semester. The program is supervised by a faculty member from Guelph who directs the studies in London and supervises correspondence with faculty in Guelph. Courses in London are of 2 kinds: London based courses and correspondence courses. London based courses in music, theatre and fine art are given by British tutors, and the coordinator offers courses in his/her area of interest. Students are also permitted to arrange correspondence courses to meet their particular needs. Students wishing to apply for the London Semester should have good academic standing and should have completed at least 2 semesters at the University of Guelph at the time of application; although preference will be given to those with a cumulative average of 70% or above, all applications will be given careful consideration. More detailed information about academic requirements, bursaries, courses, etc. can be obtained from the B.A. Program Counselling Office, Room 130 in the MacKinnon Building.

### Honours and General Specializations Available in the B.A. Degree

#### General Program Areas of Concentration

Anthropology

Computing and Information Science

Economics

English

French Studies

Geography

History

International Development

Mathematics

Music

Philosophy

Political Science

Sociology

Spanish

Statistics

Theatre Studies

Women's Studies

**The schedule of studies for each area of concentration is given on the following pages under its subject heading.**

### Honours Program Majors

Agricultural Economics

Anthropology

Art History

Classical Languages

Classical Studies

Computing and Information Science\*

Criminal Justice and Public Policy

Economics\*

English  
 European Studies  
 French Studies  
 Geography  
 History  
 Individual Studies  
 Information Systems and Human Behaviour  
 International Development  
 Mathematical Economics  
 Mathematics  
 Music  
 Philosophy  
 Political Science  
 Psychology\*  
 Rural and Development Sociology  
 Sociology  
 Spanish  
 Statistics  
 Studio Art  
 Theatre Studies  
 Women's 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  
 Art Theory and Criticism  
 Business Administration  
 Classical Languages  
 Classical Studies  
 Cognitive Neuropsychology  
 Computing and Information Science  
 Criminal Justice and Public Policy  
 Developmental Psychology  
 Economics  
 Educational Psychology  
 English  
 Environmental Studies  
 European Culture and Civilization  
 Family and Child Studies  
 French Studies  
 Geography  
 German  
 History  
 International Development  
 Italian  
 Marketing Management  
 Mathematics  
 Museum Studies  
 Music  
 Organizational Behaviour  
 Philosophy  
 Political Science  
 Rural Extension Studies  
 Social Psychology  
 Sociology  
 Spanish  
 Statistics  
 Studio Art  
 Theatre Studies  
 Visual Arts of the Americas  
 Women's Studies

**The schedule of studies for each minor is given on the following pages under its subject heading.**

## Agricultural Economics (AGEC)

### Department of Agricultural Economics and Business, Ontario Agricultural College

The study of agricultural economics prepares students for careers as economic analysts in the agrifood sector and in public agencies. In addition, this major provides excellent background for those students planning to do graduate work in agricultural and resource economics and other fields of applied economics.

Agricultural Economics is offered as a major in the honours program. A detailed program planning guide is available in the Department of Agricultural Economics and Business.

### Major (Honours Program)

A minimum of 9.50 credits, consisting of the 15 courses specified below plus 4 restricted electives, is required, including:

AGEC*2220	[0.50]	Financial Accounting
AGEC*2700	[0.50]	Survey of Natural Resource Economics
AGEC*3030	[0.50]	The Firm and Markets
AGEC*4000	[0.50]	Agricultural and Food Policy
AGEC*4500	[0.50]	Decision Science
AGR*1100	[0.50]	Introduction to the Agrifood Systems
AGR*1250	[0.50]	Agrifood System Trends & Issues
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*2770	[0.50]	Introductory Mathematical Economics
ECON*3600	[0.50]	Macroeconomics in an Open Economy
ECON*3710	[0.50]	Advanced Microeconomics
ECON*3740	[0.50]	Introduction to Econometrics

Four additional courses, at least three of which must be in agricultural economics and at least one of which must be at the 4000 level, chosen from the following list:

AGEC*2230	[0.50]	Management Accounting
AGEC*4210	[0.50]	World Agriculture and Economic Development
AGEC*4220	[0.50]	Advanced Farm Management
AGEC*4240	[0.50]	Futures and Options Markets
AGEC*4290	[0.50]	Land Economics
AGEC*4310	[0.50]	Resource Economics
ECON*3510	[0.50]	Money, Credit and the Financial System
ECON*3530	[0.50]	Industrial Organization
ECON*3580	[0.50]	Economics of Regulation
ECON*3610	[0.50]	Public Economics
ECON*3620	[0.50]	International Trade
ECON*3720	[0.50]	History of the World Economy Since 1850

**Notes:** Prerequisites for the above courses will require students to take MATH\*1000, MATH\*1080, or MATH\*1200 during their first year of study. 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.

## 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.

Anthropology credit may also be given for some Sociology courses, with the exception of SOC\*3840 through SOC\*4910 inclusive. See a Sociology/Anthropology Faculty Advisor for approval of substitutions.

### Area of Concentration (General Program)

A minimum of 6.00 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]	History of Anthropological Thought
ANTH*3770	[0.50]	Kinship and Social Organization
SOAN*2120	[0.50]	Introductory Methods
One of:		
LING*1000	[0.50]	Introduction to Linguistics
MUSC*2110	[0.50]	Music of the Circum-Atlantic and the Americas
MUSC*2200	[0.50]	Music of the Near and Far East
PHIL*2100	[0.50]	Critical Thinking

1.50 additional credits in ANTH

1.00 additional credits in SOAN

Note: 1.50 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]	History of Anthropological Thought
ANTH*3770	[0.50]	Kinship and Social Organization
ANTH*4700	[0.50]	Issues in Contemporary Anthropological Theory
LING*1000	[0.50]	Introduction to Linguistics
SOAN*2120	[0.50]	Introductory Methods
SOAN*3070	[0.50]	Qualitative and Observational Methods

One of:

MUSC*2110	[0.50]	Music of the Circum-Atlantic and the Americas
MUSC*2200	[0.50]	Music of the Near and Far East
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 6.00 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]	History of Anthropological Thought
ANTH*3770	[0.50]	Kinship and Social Organization
SOAN*2120	[0.50]	Introductory Methods

One of:

LING*1000	[0.50]	Introduction to Linguistics
MUSC*2110	[0.50]	Music of the Circum-Atlantic and the Americas
MUSC*2200	[0.50]	Music of the Near and Far East
PHIL*2100	[0.50]	Critical Thinking

1.50 additional credits in ANTH

1.00 additional credits in SOAN

Note: 1.50 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 in each of three areas of focus in the program: Western Art; Visual Arts of the Americas; and Art Theory, Critical Methodology and Museology. The groups of courses that comprise these areas of focus are listed below.

Students interested in the study of Art History in conjunction with other programs are recommended to look at the Minors offered in Visual Arts of the Americas, Museum Studies, and Art Theory and Criticism. 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.

Art History Core Requirements

All students are required to complete the following core courses [2.00 credits]:

ARTH*1220	[0.50]	The Visual Arts Today
ARTH*1510	[0.50]	Art Historical Studies I

ARTH*1520	[0.50]	Art Historical Studies II
and one [0.50] of the following:		
SART*1050	[0.50]	Integrated 2-D Media
SART*1060	[0.50]	Media Convergence

Major (Honours Program)

A minimum of 9.00 credits is required, including:

- a. the Art History core
- b. 2.00 credits from the Western Art and Cross-Cultural Perspectives area of focus including: 0.50 credits in Ancient (ARTH\*2150, ARTH\*3150), 0.50 credits in Medieval (ARTH\*2540, ARTH\*3540), 0.50 credits in Renaissance & Baroque (ARTH\*2550, ARTH\*2950, ARTH\*3100, ARTH\*3550, ARTH\*3640), 0.50 credits in Modern (ARTH\*2280, ARTH\*2290, ARTH\*2580, ARTH\*2600, ARTH\*3520, ARTH\*3570)
- c. 1.50 credits from the Arts of the Americas area of focus
- d. 1.00 credits from the Art Theory, Critical Methodology and Museology area of focus
- e. 2.50 additional credits in Art History

**Note:** a minimum of 4.00 credits in Art History must be at the 3000 level or above, including at least 1.00 credits in Art History at the 4000 level.

Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- a. ARTH\*1220, ARTH\*1510, ARTH\*1520
- b. 3.50 additional credits in Art History including 0.50 credits in each of the three areas of focus and at least 2.00 credits at the 3000 or 4000 level.

Areas of Focus

Western Art and Cross-Cultural Perspectives

ARTH*2150	[0.50]	Art and Archaeology of Greece
ARTH*2280	[0.50]	Modern Architecture
ARTH*2290	[0.50]	History of Photographic Media
ARTH*2540	[0.50]	Medieval Art
ARTH*2550	[0.50]	The Italian Renaissance
ARTH*2580	[0.50]	Late Modern Art: 1900-1950
ARTH*2600	[0.50]	Early Modern Art to 1900
ARTH*2950	[0.50]	Baroque Art
ARTH*3100	[0.50]	Perspectives: Structure and Space in Renaissance and Baroque Art
ARTH*3150	[0.50]	Space: Roman Art and Urbanism
ARTH*3200	[0.50]	Colour: Practice and Meanings in Western Art
ARTH*3520	[0.50]	Idea: Art Since 1950
ARTH*3540	[0.50]	Image: The Arts in the Medieval Era
ARTH*3550	[0.50]	Lives: Aspects of High Renaissance Art
ARTH*3570	[0.50]	Display: Visual Culture in Late 19th Century Europe
ARTH*3640	[0.50]	Objects: Baroque Art and Rococo Art
ARTH*4150	[0.50]	Seminar in Western Art I
ARTH*4160	[0.50]	Seminar in Western Art II

Arts of the Americas

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*2490	[0.50]	History of Canadian Art
ARTH*3010	[0.50]	Contemporary Canadian Art
ARTH*3050	[0.50]	Pre-Columbian Art
ARTH*3060	[0.50]	Public Art
ARTH*4050	[0.50]	Seminar in the Americas I
ARTH*4060	[0.50]	Seminar in the Americas II

Art Theory, Critical Methodology and Museology

ARTH*2120	[0.50]	Introduction to Museology
ARTH*2480	[0.50]	Introduction to Art Theory and Criticism
ARTH*3210	[0.50]	Critical Issues in Art History
ARTH*3220	[0.50]	Nationalism and Identity in Art
ARTH*3780	[0.50]	Gender and Art
ARTH*4550	[0.50]	Questions in Criticism
ARTH*4620	[0.50]	Museum Studies

**Note:** Details of advanced standing for transfer students from the Ontario College of Art can be found in the section on Admission Information.

Art Theory and Criticism (ATC)

School of Fine Art and Music

The Minor program in Art Theory and Criticism offers students the opportunity to engage critically with the most significant interpretative methods art historians and critics use to analyze artwork. Courses will provide an overview of important debates in the field and of their contexts, as well as informed discussions of the issues that are raised when textuality and visuality come together.

This program of study is designed as a complement to a significant number of Major specialization, and is suitable for any student wishing to broaden their knowledge beyond

their Major area of study. Students wishing to combine this Minor with a Major in Art History are advised that the selection of their required courses should begin early in their degree, and that they should obtain counselling from faculty to ensure they can achieve the correct distribution.

### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- |    |  |        |  |
|----|--|--------|--|
| a. | ARTH*1220  | [0.50] | The Visual Arts Today                    |
|    | ARTH*1510  | [0.50] | Art Historical Studies I                 |
|    | ARTH*1520  | [0.50] | Art Historical Studies II                |
|    | PHIL*3050  | [0.50] | Philosophy of Art                        |
| b. | 3.00 additional credits in Art History as follows: |        |  |
|    | ARTH*2480  | [0.50] | Introduction to Art Theory and Criticism |
|    | ARTH*3210  | [0.50] | Critical Issues in Art History           |
|    | ARTH*3220  | [0.50] | Nationalism and Identity in Art          |
|    | ARTH*3520  | [0.50] | Idea: Art Since 1950                     |
|    | ARTH*3780  | [0.50] | Gender and Art                           |
|    | ARTH*4550  | [0.50] | Questions in Criticism                   |

### Business Administration (BADM)

#### Department of Economics, College of Social and Applied Human Sciences

Interdisciplinary study in Business Administration is offered as a minor in the honours program. Students in this program will be counselled by the Department of Economics. It is possible for students to pursue a more intensive program in the area of business administration and economics; see the heading Applied Economics in the B.A. degree and the heading Management Economics in Industry and Finance in the B.Comm. degree.

### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- |           |        |   |
|-----------|--------|---|
| AGEC*2220 | [0.50] | Financial Accounting                    |
| AGEC*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*3560 | [0.50] | Theory of Finance                       |
| MCS*3040  | [0.50] | Business and Consumer Law               |
| One of:   |        |   |
| AGEC*3310 | [0.50] | Operations Management                   |
| HTM*4390  | [0.50] | Individuals and Groups in Organizations |
| One of:   |        |   |
| AGEC*4370 | [0.50] | Marketing Management                    |
| MCS*1000  | [0.50] | Introductory Marketing                  |

### Classical Languages (CLAL)

#### School of Languages and Literatures, College of Arts

The Classical Languages program imparts an advanced knowledge of Greek and Latin and is designed for students who have a special interest in literature, history and philosophy or plan to do postgraduate study in any area of Classics.

### Core Requirements

GREK\*1100, GREK\*1110, GREK\*2020, LAT\*1100, LAT\*1110, LAT\*2000

### Major (Honours Program)

A minimum of 9.00 credits is required, including:

- the Classical Languages core
- any 5.00 credits from CLAS\*3050, CLAS\*3060, CLAS\*3070, CLAS\*3080, CLAS\*3090, CLAS\*3120, CLAS\*4010
- LAT\*4100, LAT\*4150

### Minor (Honours Program)

A minimum of 6.00 credits is required, including:

- the Classical Languages core
- any 3.00 credits from those listed under Item (b) above

### Classical Studies (CLAS)

#### School of Languages and Literatures, College of Arts

The program in Classical Studies is intended particularly for students interested in Greek and Roman culture, society and history.

### Core Requirements

- CLAS\*1000, plus EITHER (GREK\*1100, GREK\*1110, GREK\*2020) OR (LAT\*1100, LAT\*1110, LAT\*2000)
- one of CLAS\*2000, CLAS\*2150, CLAS\*2350, CLAS\*3100
- one of CLAS\*3000, CLAS\*3010, CLAS\*3020
- one of CLAS\*3030, CLAS\*3040
- one of CLAS\*3150, CLAS\*3200, HIST\*2850, PHIL\*2140

### Major (Honours Program)

A minimum of 8.00 credits is required, including:

- the Classical Studies Core
- CLAS\*4000, CLAS\*4150, CLAS\*4400
- 2.50 additional credits in Classics, 1.00 of which may be taken from the following as part of the program:
 

d. ENGL*1410	[0.50]	Major English Writers
HIST*2200	[0.50]	The Medieval World
LING*1000	[0.50]	Introduction to Linguistics

### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- the Classical Studies Core
- two of CLAS\*4000, CLAS\*4150, CLAS\*4400

### Cognitive Neuropsychology (CGNR)

#### Department of Psychology, College of Social and Applied Human Sciences

Ellis and Young (1988) defined cognitive psychology as the "study of those mental processes which underlie and make possible our everyday ability to recognize familiar objects and people, to find our way around in the world, to speak, read and write, and to plan and execute actions, to think, make decisions and remember." They proposed two complementary aims in the study of cognitive neuropsychology:

- To explain the patterns of impaired and intact cognitive performance seen in brain-injured patients in terms of damage to one or more of the components of a theory or model of normal cognitive functioning.
- To draw conclusions about normal, intact cognitive processes from the patterns of impaired and intact capabilities seen in brain-injured patients.

The Minor program in Cognitive Neuropsychology is targeted for students seeking to broaden their knowledge beyond their major area of study. It may be of particular interest to students specializing in biology or computer science. A Minor in cognitive neuropsychology will prove valuable to students seeking careers in research and medicine.

### Minor (Honours Program)

(May not be taken in combination with a Psychology Honours Major)

A minimum of 6.00 credits is required, including:

- |           |        |  |
|-----------|--------|--|
| PSYC*1100 | [0.50] | Principles of Behaviour                |
| PSYC*1200 | [0.50] | Dynamics of Behaviour                  |
| PSYC*2360 | [0.50] | Introductory Research Methods          |
| PSYC*2390 | [0.50] | Principles of Sensation and Perception |
| PSYC*2410 | [0.50] | Behavioural Neuroscience I             |
| PSYC*2650 | [0.50] | Cognitive Psychology                   |
| PSYC*3330 | [0.50] | Memory                                 |
| PSYC*3340 | [0.50] | Psycholinguistics                      |
| PSYC*3410 | [0.50] | Behavioural Neuroscience II            |
| PSYC*4600 | [0.50] | Cognitive Neuroscience                 |

One of:

- |           |        |                              |
|-----------|--------|------------------------------|
| PSYC*2010 | [0.50] | Quantification in Psychology |
| STAT*2040 | [0.50] | Statistics I                 |

0.50 additional credits in Psychology

**Note:** Courses designated with (H) in Section XII--Course Descriptions are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology.

### Computing and Information Science (CIS)

#### Department of Computing and Information Science, College of Physical and Engineering Science

The Computing and Information Science program emphasizes the applications of computing in other academic disciplines and in business environments. "B" grades are required for but do not guarantee admission to semester three of C.I.S. programs. The BA Program serves students who want computing at the core of a liberal education. The BA is also suited for students who wish to manipulate quantities of data or apply computing techniques across disciplines, especially in the social sciences, humanities or fine arts. Students with a more narrowly focused area of application might consider the BSc program for the natural and biological sciences or the B.Comp Program for other specializations. All three programs can lead to graduate work or positions in industry.

### Area of Concentration (General Program)

A minimum of 5.25 credits is required, including:

- |          |        |  |
|----------|--------|--|
| CIS*1500 | [0.50] | Introduction to Programming                  |
| CIS*1910 | [0.50] | Discrete Structures in Computing I           |
| 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 |
| CIS*2910 | [0.50] | Discrete Structures in Computing II          |
| CIS*3530 | [0.50] | Data Base Systems and Concepts               |

1.00 additional C.I.S. credits at the 2000 level or higher

## Major (Honours Program)

### Semester 1

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I

1.00 electives from different subject areas in the College of Arts (ENGL\*1080 or ENGL\*1200 is recommended)

0.50 electives from selected subject areas in the College of Social and Applied Human Sciences\*

### Semester 2

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming

0.50 electives from the College of Arts

1.00 electives from selected subject areas in the College of Social and Applied Human Sciences\*

### Semester 3

CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2520	[0.50]	Data Structures
CIS*2910	[0.50]	Discrete Structures in Computing II

0.50 electives

### Semester 4

CIS*2750	[0.75]	Software Systems Development and Integration
CIS*3110	[0.50]	Operating Systems
STAT*2040	[0.50]	Statistics I

0.75 electives

Note: 0.50 electives may be selected in semester 4 followed by 0.50 electives in semester 5

### Semester 5

CIS*2460	[0.50]	Modelling of Computer Systems
CIS*3530	[0.50]	Data Base Systems and Concepts
CIS*3750	[0.75]	System Analysis and Design in Applications

0.50 C.I.S. electives at 3000 level or above (CIS\*3210 [0.50] is recommended)

0.25 elective

### Semester 6

CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
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1.00 C.I.S. electives at 3000 level or above

1.00 electives

### Semester 7

1.00 C.I.S.. credits at the 4000 level

1.50 electives

### Semester 8

1.00 C.I.S. credits at the 4000 level

1.50 electives

\*1.50 electives in semesters 1 and 2 must be from at least two of the following subject areas in the College of Social and Applied Human Sciences: ANTH, ECON, GEOG, POLS, PSYC, SOAN, SOC, WMST

## Minor (Honours Program)

A minimum of 5.25 credits is required, including:

CIS*1500	[0.50]	Introduction to Programming
CIS*1910	[0.50]	Discrete Structures in Computing I
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
CIS*2910	[0.50]	Discrete Structures in Computing II
CIS*3530	[0.50]	Data Base Systems and Concepts

1.00 additional credits from C.I.S. or STAT courses at the 2000 level or above

## Computing and Information Science (Co-op) (CIS:C)

### Department of Computing and Information Science, College of Physical and Engineering Science

The 4 year Honours Program Major in Computing and Information Science is also available as a Co-operative Education Program. Three co-op work terms are required.

COOP\*1100 must be completed in the 2nd academic semester (Winter of year 1). Students may apply for these options at the time of University admission or completion of semester 2. A five year option with four work terms is also available. Please see the department's co-op academic advisor for details.

Conditions for graduation are the same as the corresponding regular B.A. program. In addition, all work reports must have a grade of satisfactory or better.

Recommended work terms are shown below:

### Work/Study Semesters

## List A

### Semester 1(Fall)

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I

1.00 electives from different subject areas in the College of Arts (ENGL\*1080 or ENGL\*1200 is recommended)

0.50 electives from selected subject areas in the College of Social and Applied Human Sciences\*

### Semester 2(Winter)

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education

0.50 electives from the College of Arts

1.00 electives from selected subject areas in the College of Social and Applied Human Sciences\*

### Semester 3(Summer)

CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2520	[0.50]	Data Structures
CIS*2910	[0.50]	Discrete Structures in Computing II

0.50 electives in the Area of Application or electives

### Fall Semester

COOP*1000	[0.00]	Co-op Work Term I
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### Semester 4(Winter)

CIS*2750	[0.75]	Software Systems Development and Integration
CIS*3110	[0.50]	Operating Systems
STAT*2040	[0.50]	Statistics I

0.75 electives

### Summer Semester

COOP*2000	[0.00]	Co-op Work Term II
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### Semester 5(Fall)

CIS*2460	[0.50]	Modelling of Computer Systems
CIS*3530	[0.50]	Data Base Systems and Concepts
CIS*3750	[0.75]	System Analysis and Design in Applications

0.50 C.I.S. electives at 3000 level or above (CIS\*3210 recommended)

0.25 elective

### Winter Semester

COOP*3000	[0.00]	Co-op Work Term III
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### Semester 6(Summer)

CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
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1.00 C.I.S. electives at 3000 level or above

1.00 electives

### Semester 7(Fall)

1.00 C.I.S. credits at the 4000 level

1.50 electives

### Semester 8(Winter)

1.00 C.I.S. credits at the 4000 level

1.50 electives

\*1.50 electives in semesters 1 and 2 must be from at least two of the following subject areas in the College of Social and Applied Human Sciences: ANTH, ECON, GEOG, POLS, PSYC, SOAN, SOC, WMST

## List B

### Semester 1(Fall)

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I

1.00 electives from different subject areas in the College of Arts ( ENGL\*1060 or ENGL\*1200 is recommended)

0.50 electives from selected subject areas in the College of Social and Applied Human Sciences\*

### Semester 2(Winter)

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education

0.50 electives from the College of Arts

1.00 electives from selected subject areas in the College of Social and Applied Human Sciences\*

### Semester 3(Summer)

CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2520	[0.50]	Data Structures
CIS*2910	[0.50]	Discrete Structures in Computing II

0.50 electives in the Area of Application or electives

**Fall Semester**

COOP\*1000 [0.00] Co-op Work Term I

**Semester 4(Winter)**

CIS\*2750 [0.75] Software Systems Development and Integration  
 CIS\*3110 [0.50] Operating Systems  
 CIS\*3490 [0.50] The Analysis and Design of Computer Algorithms  
 STAT\*2040 [0.50] Statistics I

0.25 credit in the Area of Application or elective

**Summer Semester**

COOP\*2000 [0.00] Co-op Work Term II

**Semester 5(Fall)**

CIS\*2460 [0.50] Modelling of Computer Systems  
 CIS\*3530 [0.50] Data Base Systems and Concepts  
 CIS\*3750 [0.75] System Analysis and Design in Applications

0.75 credits in the Area of Application or electives

**Winter Semester**

COOP\*3000 [0.00] Co-op Work Term III

**Semester 6(Summer)**

Alternative 1 [Recommended]

CIS\*3760 [0.75] Software Engineering

0.50 C.I.S. electives at the 3000 level or above

1.25 credits in the Area of Application or electives

OR Alternative 2

1.50 C.I.S. electives at the 3000 level or above

1.00 credits in the Area of Application or electives

**Semester 7(Fall)**

1.00 credits in the Area of Application or electives

0.50 credits in the C.I.S. at 3000 level or above

1.00 credits in C.I.S. at the 4000 level

**Semester 8(Winter)**

CIS\*4000 [0.50] Applications of Computing Seminar

1.00 C.I.S. credits at the 4000 level

1.50 credits in the Area of Application or electives

0.50 credits in the C.I.S. at 4000 level

\*1.50 electives in semesters 1 and 2 must be from at least two of the following subject areas in the College of Social and Applied Human Sciences: ANTH, ECON, GEOG, POLS, PSYC, SOAN, SOC, WMST

**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 honours program and as a major in the honours 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, applicants must have a cumulative average of 70% or better in the following foundation courses:

POLS\*1400 [0.50] Issues in Canadian Politics  
 POLS\*2250 [0.50] Public Administration  
 POLS\*2300 [0.50] Canadian Government  
 SOAN\*2120 [0.50] Introductory Methods  
 SOC\*1500 [0.50] Crime and Criminal Justice  
 SOC\*2700 [0.50] Criminological Theory

Note: The requirement for an average of 70% or better applies only to students admitted to the University of Guelph after 30 April 2002.

Students wishing to declare the CJPP minor must 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.

**Note:** There is no CJPP Area of Concentration in the General Program as of Fall 2002.

**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 [0.50] Public Administration  
 POLS\*2300 [0.50] Canadian Government

SOAN\*2120 [0.50] Introductory Methods  
 SOC\*1500 [0.50] Crime and Criminal Justice  
 SOC\*2700 [0.50] Criminological Theory

One of:

POLS\*3650 [0.50] The Systematic Study of Politics  
 SOAN\*3120 [0.50] Quantitative Methods

Three of:

SOC\*2070 [0.50] Social Deviance  
 SOC\*2750 [0.50] Serial Murder  
 SOC\*3490 [0.50] Law and Society  
 SOC\*3710 [0.50] Young Offenders  
 SOC\*3730 [0.50] Courts and Society  
 SOC\*3740 [0.50] Corrections and Penology  
 SOC\*3750 [0.50] Police in Society

Three of:

POLS\*3110 [0.50] Politics of Ontario  
 POLS\*3130 [0.50] Law, Politics, and Judicial Process  
 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

One of:

HIST\*3130 [0.50] Popular Culture and Punishment, 1700-1900  
 PHIL\*3040 [0.50] Philosophy of Law  
 PHIL\*3230 [0.50] Issues in Social and Political Philosophy  
 PSYC\*3020 [0.50] Psychology of Law

Three of:

POLS\*4100 [0.50] Women, Justice and Public Policy  
 POLS\*4120 [0.50] Civil Rights and Civil Liberties in Canada and the U.S.  
 POLS\*4160 [0.50] Multi-Level Governance in Canada  
 POLS\*4250 [0.50] Problems in Public Administration and Public Policy  
 POLS\*4260 [0.50] Topics in Public Policy  
 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 6.00 credits is required, including:

PHIL\*1010 [0.50] Introductory Philosophy: Social and Political Issues  
 POLS\*1400 [0.50] Issues in Canadian Politics  
 POLS\*2250 [0.50] Public Administration  
 POLS\*2300 [0.50] Canadian Government  
 SOAN\*2120 [0.50] Introductory Methods  
 SOC\*1500 [0.50] Crime and Criminal Justice  
 SOC\*2700 [0.50] Criminological Theory

Two of:

SOC\*2070 [0.50] Social Deviance  
 SOC\*2750 [0.50] Serial Murder  
 SOC\*3490 [0.50] Law and Society  
 SOC\*3710 [0.50] Young Offenders  
 SOC\*3730 [0.50] Courts and Society  
 SOC\*3740 [0.50] Corrections and Penology  
 SOC\*3750 [0.50] Police in Society

Two of:

POLS\*3110 [0.50] Politics of Ontario  
 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

One of:

HIST\*3130 [0.50] Popular Culture and Punishment, 1700-1900  
 PHIL\*3040 [0.50] Philosophy of Law  
 PHIL\*3230 [0.50] Issues in Social and Political Philosophy  
 PSYC\*3020 [0.50] Psychology of Law

**Developmental Psychology (DPSY)****Department of Psychology, College of Social and Applied Human Sciences**

The focus of Developmental Psychology is the study of the theory, research, and applied interventions associated with the way humans develop and change over time. This focus is especially significant for anyone interested in how we might solve the challenges presented by life. These include the special challenges presented by schooling, parenting, socialization within and beyond the family, coping with stress, and some of the individual differences and atypical behaviors exhibited by ourselves or others. This program of study

is designed as a complement to a significant number of Major specializations, suitable for any student wishing to broaden their knowledge beyond their Major area of study.

### Minor (Honours Program)

**(May not be taken in combination with a Psychology Honours Major)**

A minimum of 6.00 credits is required, including:

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour

2.50 credits across 5 Psychology Core Courses, to include PSYC\*2330, PSYC\*2450, PSYC\*2650

2.00 credits from the following courses at the 3000 level:

PSYC*3440	[0.50]	Cognitive Development
PSYC*3450	[0.50]	Social and Personality Development
PSYC*3460	[0.50]	Abnormal Development
PSYC*3710	[0.50]	Psychology of Learning Difficulties and Disabilities I
PSYC*3850	[0.50]	Intellectual Disabilities

0.50 elective credits in Psychology at the 3000 level or above, with PSYC\*3570, PSYC\*3800 or the 5th course from the above restricted elective list recommended.

**Note:** Courses designated with (H) in Section XII--Course Descriptions are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology.

### Economics (ECON)

Department of Economics, **College of Social and Applied Human Sciences**

The Department of Economics offers courses in economic theory, applied economics and quantitative methods. Students may take courses leading to a B.A. in either the honours or the general program. 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 about 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
ECON*2740	[0.50]	Economic Statistics

#### Area of Concentration (General Program)

A minimum of 5.00 credits in Economics is required, including:

- the Economics core
- 2.50 other credits in Economics at the 3000 or 4000 level

### Major (Honours Program)

A minimum of 9.00 credits in Economics is required, including:

The Economics core requirements

ECON*2770	[0.50]	Introductory Mathematical Economics
ECON*3100	[0.50]	Game Theory
ECON*3600	[0.50]	Macroeconomics in an Open Economy
ECON*3710	[0.50]	Advanced Microeconomics
ECON*3740	[0.50]	Introduction to Econometrics
ECON*4710	[0.50]	Advanced Topics in Microeconomics
ECON*4810	[0.50]	Advanced Macroeconomic Theory

(Note: ECON\*2770 requires a first year university calculus course)

One of:

ECON*2720	[0.50]	Business History
ECON*3550	[0.50]	North American Economic History
ECON*3720	[0.50]	History of the World Economy Since 1850
ECON*3730	[0.50]	Europe and the World Economy to 1914
ECON*4720	[0.50]	Topics in Economic History

2.50 other 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, Applied Econometrics and ECON\*4840, Applied Econometrics II.

### Minor (Honours Program)

A minimum of 5.00 credits in Economics is required, including:

- the Economics core
- 2.50 other credits in economics at the 3000 or 4000 level

**Notes:**

- ECON\*3740 is recommended.
- Students wishing to pursue a more structured Economics minor should take ECON\*3710 as well as ECON\*3740.

- Only one of ECON\*2200 or ECON\*3200 may be counted towards the minor. ECON\*4800 may not be counted at the 4000 level for purposes of satisfying the minimum 4000 level credit requirements in the B.A. Honours Economics major. Only one of ECON\*4900 or ECON\*4910 may count in the B.A. program towards the minimum 4000 level requirement.

### Economics (Co-op) (ECON:C)

Department of Economics, **College of Social and Applied Human Sciences**

The Economics Co-op program provides an integrated academic/work experience for students with co-operating employer organizations. Students in the program must complete 4 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 in 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.

### Major (Honours Program)

#### Semester 1

ECON*1050	[0.50]	Introductory Microeconomics
One 1000 level calculus course		
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	[0.00]	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

COOP*1000	[0.00]	Co-op Work Term I
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#### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Semester 5 (Winter)

ECON*3100	[0.50]	Game Theory
ECON*3600	[0.50]	Macroeconomics in an Open Economy
One 3000 level economics course		
1.00 electives		

#### Summer Semester

Optional -- at the discretion of the student.

#### Semester 6 (Fall)

ECON*3710	[0.50]	Advanced Microeconomics
One 4000 level Economics course (ECON*4640 is recommended)		
1.50 electives		

#### Winter Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Summer Semester

COOP*4000	[0.00]	Co-op Work Term IV
-----------	--------	--------------------

#### Semester 7 (Fall)

ECON*4710	[0.50]	Advanced Topics in Microeconomics
One 4000 level Economics course		
1.00 electives		

#### Semester 8 (Winter)

ECON*4810	[0.50]	Advanced Macroeconomic Theory
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0.50 Economics at the 4000 level

1.50 electives

\*the economic history course may be taken in any semester

## Educational Psychology (EPSY)

### Department of Psychology, College of Social and Applied Human Sciences

This program allows for specialization in Psychology as it relates to Education. It may be of particular interest to teachers, those considering teaching as a career, or anyone interested in the field of Educational Psychology.

### Minor (Honours Program)

(May not be taken in combination with a Psychology Honours Major)

A minimum of 6.00 credits is required, including:

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
PSYC*2010	[0.50]	Quantification in Psychology
PSYC*2450	[0.50]	Introduction to Developmental Psychology
PSYC*3250	[0.50]	Psychological Measurement
PSYC*3710	[0.50]	Psychology of Learning Difficulties and Disabilities I
PSYC*3800	[0.50]	Psychology and Education

0.50 credits from the following courses at the 2000 level:

PSYC*2330	[0.50]	Principles of Learning
PSYC*2650	[0.50]	Cognitive Psychology

2.00 credits from the following courses at the 3000 level:

PSYC*3310	[0.50]	Applied Social Psychology
PSYC*3330	[0.50]	Memory
PSYC*3340	[0.50]	Psycholinguistics
PSYC*3440	[0.50]	Cognitive Development
PSYC*3450	[0.50]	Social and Personality Development
PSYC*3460	[0.50]	Abnormal Development
PSYC*3720	[0.50]	Psychology of Learning Difficulties and Disabilities II
PSYC*3850	[0.50]	Intellectual Disabilities

**Note:** Courses designated with (H) in Section XII--Course Descriptions are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology.

## English (ENGL)

### School of English and Theatre Studies, College of Arts

The School of English and Theatre Studies offers courses in the BA Program in English that focus on the study of literature and related texts across a broad range of theoretical, historical, and geographical sites. The School also welcomes non-majors into its courses, especially at the 1000, 2000, and 3000 levels, suitable to other majors within the College of Arts and beyond. Certain courses in Theatre Studies (THST) and in Literature in Translation (CLAS, GERM, HUMN, SPAN) may be counted towards a degree in English. Consult the School of English and Theatre Studies for details.

### Area of Concentration (General Program)

A minimum of 5.50 English credits is required, including:

- 1.00 credits from ENGL\*1080 and ENGL\*2080
- 1.00 credits from ENGL\*2120 and one of ENGL\*2130, ENGL\*3940, ENGL\*3960
- 2.00 credits from 3000 level lecture courses to fulfill degree requirements as listed below

In addition, students must complete:

- 1.00 credits from any other 3000 level lecture courses
- 0.50 credits from any other seminar or lecture course

It is recommended that students take 0.50 credits at the 2000 level in a lecture course.

General Program Degree requirements to be fulfilled in part through 2.00 credits from 3000 level lecture courses in the following areas:

- 0.50 credits in Early Modern Literature
- 0.50 credits in 18th and 19th Century Literature
- 0.50 credits in Colonialisms/Postcolonialisms
- 0.50 credits in Canadian Literature/American Literature

### Major (Honours Program)

A minimum of 8.50 English credits is required, including:

- 1.00 credits from ENGL\*1080 and ENGL\*2080
- 2.00 credits from ENGL\*2120, ENGL\*2130, ENGL\*3940, ENGL\*3960
- 3.50 credits from 3000 level lecture courses which fulfill degree requirements listed below
- 1.00 credits from 4000 level courses
- 1.00 credits from any other lecture courses on offer.

It is recommended that students take two 2000 level lecture courses.

Honours Program Major Degree Requirements to be fulfilled in part through 3.50 credits from 3000 level lecture courses in the following areas:

- 1.00 credits in Early Modern Literature

- 1.00 credits in 18th and 19th Century Literature
- 0.50 credits in American Literature
- 0.50 credits in Canadian Literature
- 0.50 credits in Colonialisms/Postcolonialisms

**Note:** 4000 level courses may in some instances fulfill these area requirements, depending on their content. See the School of English and Theatre Studies for details.

**Honours students interested in a more concentrated program or contemplating graduate work in English are strongly advised to:**

- attain a good reading knowledge of another language, such as French
- take ENGL\*3380 (Studies in the History of Literary Production), ENGL\*3690 (History of Literary Criticism), ENGL\*4690 (Contemporary Literary Theory)
- take at least 2.00 credits in English courses at the 4000 level

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 Studies (ENVS)

### Interdisciplinary Program

Environmental Studies is an interdisciplinary subject stressing the integration of biophysical and human behavioral dimensions of environmental issues. The requirement of 5.00 credits for the minor is broken into 2 groups of courses, required courses and restricted electives. Students should ensure that they obtain standing in the necessary prerequisites for required and restricted elective courses. There are limitations on courses used for credit in other areas of study which may be used for credit in the Environmental Studies minor. Students should seek counselling from the Department of Geography early in their program.

### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

BIOL*1030	[0.50]	Biology I
BIOL*2060	[0.50]	Ecology
ISS*4000	[0.50]	Research Project in Environmental Studies

Two of the following social sciences courses:

ECON*2100	[0.50]	Economic Growth and Environmental Quality
GEOG*3210	[0.50]	Management of the Biophysical Environment
POLS*3370	[0.50]	Environmental Policy Formation and Administration

The remaining 2.50 credits required for the minor must be selected from the following list. The social science course listed above not taken as a required course may be taken as a restricted elective. However, students are strongly advised to consult with the program coordinator before choosing electives.

AGEC*2700	[0.50]	Survey of Natural Resource Economics
AGEC*4310	[0.50]	Resource Economics
BIOL*1040	[0.50]	Biology II
BIOL*3450	[0.50]	Introduction to Aquatic Environments
BOT*2050	[0.50]	Plant Ecology
CROP*2280	[0.50]	Crops in Land Reclamation
ECON*4930	[0.50]	Environmental Economics
ENGG*3650	[0.50]	Hydrology
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*3000	[0.50]	Nature Interpretation
ENVB*3030	[0.50]	Pesticides and the Environment
ENVB*4780	[0.50]	Forest Ecology
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*3110	[0.50]	Biotic and Natural Resources
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*4110	[0.50]	Environmental Systems Analysis
LARC*2820	[0.50]	Urban and Regional Planning
PHIL*2070	[0.50]	Philosophy of the Environment
SOC*2280	[0.50]	Society and Environment
SOIL*2010	[0.50]	Soil Science
SOIL*3050	[0.50]	Land Utilization

## 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. Those who can demonstrate that they have written a major academic paper or exam in their chosen language while participating in an approved study year may be waived from the required course 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 13.00 credits is required, including:

- the three components of the European Studies core (8.00 credits)
- 5.00 credits in either the European Culture and Civilization or the European Business Studies area of emphasis

### Core Requirements

- |           |        |  |
|-----------|--------|--|
| EURO*1050 | [0.50] | The Emergence of a United Europe                           |
| EURO*1200 | [0.50] | European Culture from the Mid 18th to the Mid 19th Century |
| EURO*2070 | [0.50] | European Integration, 1957-1992                            |
| EURO*2200 | [0.50] | European Culture from the Mid 19th Century to the 1920's   |
| EURO*2300 | [0.50] | European Culture since 1920                                |
| EURO*4740 | [0.50] | Research Project in European Studies                       |

Note: in order to demonstrate language proficiency, students must write a research paper (EURO\*4740) in their core language unless they have spent one year studying at a European university, in the country where their chosen core language is spoken. Where that is the case, upon approval of the Coordinator for European Studies EURO\*4740 will be waived.

- 3.00 credits in one language:

- |           |        |                                     |
|-----------|--------|-------------------------------------|
| FREN*2020 | [0.50] | France: Literature and Society      |
| FREN*2030 | [0.50] | French Language II                  |
| FREN*2520 | [0.50] | French Composition I                |
| FREN*2540 | [0.50] | Spoken French: Theory and Practice  |
| FREN*3520 | [0.50] | French Composition II               |
| FREN*3530 | [0.50] | Business French                     |
| OR        |        |                                     |
| GERM*2400 | [0.50] | Contemporary Germany                |
| GERM*2490 | [0.50] | Intermediate German I               |
| GERM*2500 | [0.50] | Intermediate German II              |
| GERM*2560 | [0.50] | Themes in German Literature/Culture |
| GERM*3500 | [0.50] | Advanced German                     |

One of:

- |           |        |                               |
|-----------|--------|-------------------------------|
| GERM*2590 | [0.50] | Classics of German Literature |
| GERM*3530 | [0.50] | German in the Workplace       |

OR

- |           |        |                              |
|-----------|--------|------------------------------|
| ITAL*2060 | [0.50] | Intermediate Italian I       |
| ITAL*2070 | [0.50] | Intermediate Italian II      |
| ITAL*3060 | [0.50] | Advanced Italian             |
| ITAL*3200 | [0.50] | Novels of Resistance         |
| ITAL*3950 | [0.50] | Topics in Italian Literature |

One of:

- |           |        |                              |
|-----------|--------|------------------------------|
| ITAL*2100 | [0.50] | Renaissance Lovers and Fools |
| ITAL*3150 | [0.50] | Medieval Italian Literature  |

OR

- |              |        |  |
|--------------|--------|--|
| SPAN*2000    | [0.50] | Spanish Language I                                 |
| SPAN*2010    | [0.50] | Spanish Language II                                |
| SPAN*2040    | [0.50] | Spanish Civilization                               |
| SPAN*2990    | [0.50] | Hispanic Literary Studies                          |
| SPAN*3500    | [0.50] | Spanish Grammar and Composition I                  |
| SPAN*3530    | [0.50] | Business Spanish                                   |
| 3. CLAS*1000 | [0.50] | Introduction to Classical Culture                  |
| ISS*2500     | [0.50] | Management in Organizations                        |
| HIST*2510    | [0.50] | The Emergence of Modern European Society 1789-1945 |
| POLS*3450    | [0.50] | European Governments and Politics                  |

### Areas of Emphasis

#### European Business

Required courses:

- |           |        |                             |
|-----------|--------|-----------------------------|
| AGEC*2220 | [0.50] | Financial Accounting        |
| AGEC*2230 | [0.50] | Management Accounting       |
| AGEC*3320 | [0.50] | Financial Management        |
| ECON*1050 | [0.50] | Introductory Microeconomics |
| ECON*1100 | [0.50] | Introductory Macroeconomics |

One of:

- |           |        |                       |
|-----------|--------|-----------------------|
| AGEC*3310 | [0.50] | Operations Management |
| AGEC*4370 | [0.50] | Marketing Management  |

2.00 credits (4 courses) chosen from:

One of:

- |           |        |                       |
|-----------|--------|-----------------------|
| AGEC*3310 | [0.50] | Operations Management |
| AGEC*4370 | [0.50] | Marketing Management  |

Note: each of these courses counts as either required or restricted elective, may not be double counted

- |           |        |  |
|-----------|--------|--|
| AGEC*4250 | [0.50] | Business Policy                                  |
| ECON*2310 | [0.50] | Intermediate Microeconomics                      |
| ECON*2410 | [0.50] | Intermediate Macroeconomics                      |
| ECON*3560 | [0.50] | Theory of Finance                                |
| ECON*3660 | [0.50] | Economics of Equity Markets                      |
| ECON*3720 | [0.50] | History of the World Economy Since 1850          |
| ECON*3730 | [0.50] | Europe and the World Economy to 1914             |
| HTM*2200  | [0.50] | Organizational Behaviour I                       |
| HTM*3000  | [0.50] | Human Resources Management                       |
| HTM*3100  | [0.50] | Dimensions of Tourism                            |
| HTM*3160  | [0.50] | Destination Management and Marketing             |
| HTM*4170  | [0.50] | International Tourism Development and Management |
| HTM*4390  | [0.50] | Individuals and Groups in Organizations          |
| MCS*1000  | [0.50] | Introductory Marketing                           |
| MCS*2100  | [0.50] | Personal Financial Management                    |
| MCS*2600  | [0.50] | Fundamentals of Consumer Behaviour               |
| MCS*3020  | [0.50] | Services Marketing                               |
| MCS*3040  | [0.50] | Business and Consumer Law                        |
| STAT*2060 | [0.50] | Statistics for Business Decisions                |

### European Culture and Civilization

Students must take 5.00 credits including at least 0.50 credits from each of the following four groups. The remaining 3.00 credits may be chosen from any of the courses in the four groups.

#### Group A

- |           |        |  |
|-----------|--------|--|
| CLAS*2000 | [0.50] | Classical Mythology                                    |
| CLAS*2350 | [0.50] | The Classical Tradition                                |
| EURO*3150 | [0.50] | Topics in European Film                                |
| FREN*1000 | [0.50] | Understanding the French Speaking World                |
| FREN*2500 | [0.50] | French Translation I                                   |
| GERM*2240 | [0.50] | Germany Through the Ages                               |
| HIST*2850 | [0.50] | History of Greece and Rome                             |
| HUMN*2100 | [0.50] | Renaissance Lovers and Fools                           |
| HUMN*3130 | [0.50] | Women in Modern Spanish Fiction                        |
| HUMN*3170 | [0.50] | Women, Virtue and Honour in Spanish Drama (In English) |
| HUMN*3440 | [0.50] | Ideals and Anxieties in 19th-Century German Literature |
| HUMN*3450 | [0.50] | 20th Century German Literature and Film                |
| HUMN*4170 | [0.50] | Don Quixote and the Picaresque Novel (In English)      |

#### Group B

- |           |        |   |
|-----------|--------|---|
| HIST*1010 | [0.50] | Europe and the Early Modern World                     |
| HIST*2200 | [0.50] | The Medieval World                                    |
| HIST*2820 | [0.50] | Modern France, 1750-1992: From Louis XV to Mitterrand |
| HIST*2830 | [0.50] | The Emergence of Modern Germany 1871-1990             |
| HIST*3090 | [0.50] | Nationalism and Internationalism in Europe 1914-1957  |
| HIST*3540 | [0.50] | World War Two   |
| HIST*3570 | [0.50] | Women in Modern Europe                                |
| HIST*3750 | [0.50] | The Reformation                                       |
| HIST*3820 | [0.50] | Early Modern France                                   |
| HIST*4090 | [0.50] | Modern European History                               |
| HIST*4470 | [0.50] | Special History Project Seminar I                     |
| HIST*4570 | [0.50] | Topics in Revolution                                  |
| HIST*4580 | [0.50] | Topics in Revolution                                  |

#### Group C

- |           |        |  |
|-----------|--------|--|
| 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 to 1900   |
| ARTH*3100 | [0.50] | Perspectives: Structure and Space in Renaissance and Baroque Art |
| ARTH*3550 | [0.50] | Lives: Aspects of High Renaissance Art                           |
| ARTH*3570 | [0.50] | Display: Visual Culture in Late 19th Century Europe              |
| ARTH*3640 | [0.50] | Objects: Baroque Art and Rococo Art                              |
| MUSC*1060 | [0.50] | Introduction to Music  |
| MUSC*2010 | [0.50] | The Musical Avant-Garde  |
| MUSC*2280 | [0.50] | Masterworks of Music   |

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.

### Group D

PHIL*2140	[0.50]	History of Greek and Roman Philosophy
PHIL*2160	[0.50]	Modern European Philosophy to Hume
PHIL*3060	[0.50]	Medieval Philosophy
PHIL*3080	[0.50]	History of Modern European Philosophy from Kant
PHIL*3200	[0.50]	Contemporary European Philosophy
POLS*2000	[0.50]	Political Theory
POLS*2100	[0.50]	The State in Comparative Perspective
POLS*2200	[0.50]	International Relations
POLS*3460	[0.50]	Communism and Post-Communism

### Minor in European Culture and Civilization

The minor in European Culture and Civilization is designed for students interested in the interdisciplinary study of European culture and history. It 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.

### Program Requirements

**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 5.50 credits, at least 1.00 of which must be at the 3000 level or above, is required, including:

1. EURO\*1200 [0.50] European Culture from the Mid 18th to the Mid 19th Century
- EURO\*2200 [0.50] European Culture from the Mid 19th Century to the 1920's
- EURO\*2300 [0.50] European Culture since 1920
2. 2.00 credits in one language, at second or third year level, chosen from the following list:

FREN*2020	[0.50]	France: Literature and Society
FREN*2030	[0.50]	French Language II
FREN*2520	[0.50]	French Composition I
FREN*2540	[0.50]	Spoken French: Theory and Practice
FREN*3520	[0.50]	French Composition II
FREN*3530	[0.50]	Business French
OR		
GERM*2400	[0.50]	Contemporary Germany
GERM*2490	[0.50]	Intermediate German I
GERM*2500	[0.50]	Intermediate German II
GERM*2560	[0.50]	Themes in German Literature/Culture
GERM*3500	[0.50]	Advanced German

One of:

GERM*2590	[0.50]	Classics of German Literature
GERM*3530	[0.50]	German in the Workplace

OR

ITAL*2060	[0.50]	Intermediate Italian I
ITAL*2070	[0.50]	Intermediate Italian II
ITAL*3060	[0.50]	Advanced Italian
ITAL*3200	[0.50]	Novels of Resistance
ITAL*3950	[0.50]	Topics in Italian Literature

One of:

ITAL*2100	[0.50]	Renaissance Lovers and Fools
ITAL*3150	[0.50]	Medieval Italian Literature

OR

SPAN*2000	[0.50]	Spanish Language I
SPAN*2010	[0.50]	Spanish Language II
SPAN*2040	[0.50]	Spanish Civilization
SPAN*2990	[0.50]	Hispanic Literary Studies
SPAN*3500	[0.50]	Spanish Grammar and Composition I
SPAN*3530	[0.50]	Business Spanish

3. 2.00 credits; 0.50 credits from each of Groups A, B, C and D from the following list:

### Group A

CLAS*1000	[0.50]	Introduction to Classical Culture
CLAS*2000	[0.50]	Classical Mythology
CLAS*2350	[0.50]	The Classical Tradition
EURO*3150	[0.50]	Topics in European Film
FREN*1000	[0.50]	Understanding the French Speaking World
FREN*2500	[0.50]	French Translation I
FREN*3010	[0.50]	Twentieth-Century French Novel
FREN*3020	[0.50]	Twentieth-Century French Theatre
GERM*2240	[0.50]	Germany Through the Ages
HIST*2850	[0.50]	History of Greece and Rome
HUMN*2100	[0.50]	Renaissance Lovers and Fools

HUMN*3020	[0.50]	Myth and Fairy Tales in Germany
HUMN*3170	[0.50]	Women, Virtue and Honour in Spanish Drama (In English)
HUMN*3450	[0.50]	20th Century German Literature and Film
HUMN*4170	[0.50]	Don Quixote and the Picaresque Novel (In English)

### Group B

HIST*1010	[0.50]	Europe and the Early Modern World
HIST*2200	[0.50]	The Medieval World
HIST*2510	[0.50]	The Emergence of Modern European Society 1789-1945
HIST*2820	[0.50]	Modern France, 1750-1992: From Louis XV to Mitterand
HIST*2830	[0.50]	The Emergence of Modern Germany 1871-1990
HIST*3090	[0.50]	Nationalism and Internationalism in Europe 1914-1957
HIST*3540	[0.50]	World War Two
HIST*3570	[0.50]	Women in Modern Europe
HIST*3750	[0.50]	The Reformation
HIST*3820	[0.50]	Early Modern France
HIST*4090	[0.50]	Modern European History
HIST*4470	[0.50]	Special History Project Seminar I
HIST*4570	[0.50]	Topics in Revolution
HIST*4580	[0.50]	Topics in Revolution

### Group C

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 to 1900
ARTH*3100	[0.50]	Perspectives: Structure and Space in Renaissance and Baroque Art
ARTH*3550	[0.50]	Lives: Aspects of High Renaissance Art
ARTH*3570	[0.50]	Display: Visual Culture in Late 19th Century Europe

ARTH*3640	[0.50]	Objects: Baroque Art and Rococo Art
MUSC*1060	[0.50]	Introduction to Music
MUSC*2010	[0.50]	The Musical Avant-Garde
MUSC*2280	[0.50]	Masterworks of Music

**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.

### Group D

PHIL*2140	[0.50]	History of Greek and Roman Philosophy
PHIL*2160	[0.50]	Modern European Philosophy to Hume
PHIL*3060	[0.50]	Medieval Philosophy
PHIL*3080	[0.50]	History of Modern European Philosophy from Kant
PHIL*3200	[0.50]	Contemporary European Philosophy
POLS*2000	[0.50]	Political Theory
POLS*2100	[0.50]	The State in Comparative Perspective
POLS*2200	[0.50]	International Relations
POLS*3450	[0.50]	European Governments and Politics
POLS*3460	[0.50]	Communism and Post-Communism

### 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 and the departmental advisor. Courses taken in Europe will not count towards the specialization average.

### Practicum Opportunity:

HUMN\*3501/2 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 as a Letter of Permission 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 departmental 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: Research and Applications
NUTR*1010	[0.50]	Nutrition and Society

A further 2.50 courses offered by the Department of Family Relations and Applied Nutrition (FRHD or NUTR\*2050), of which at least 1.50 must be at the 3000 level or above including at least 0.50 at the 4000 level.

**Note:** where students have or plan to have credit for PSYC\*2450, an alternative course to FRHD\*2270 must be selected, in consultation with the departmental advisor, from those offered under the Family Studies (FRHD) listings

## 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\*1100. Francophone students may start the program with second-year courses conditional upon approval by the Faculty Advisor. Students majoring in French are advised to take elective courses in another Romance language and in Latin.

It is also recommended that students include CLAS\*1000 and 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.

### 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. Credit for programs of study successfully completed may be applied towards the University of Guelph degree requirements. Requests should be addressed well in advance of registration to the Director of the School of Languages and Literatures. A letter of permission is required (see the Section VIII--Undergraduate Degree Regulations & Procedures). Students may also take advantage of federal-provincial programs such as the Second-Language Monitor program.

### 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.

### Area of Concentration (General Program)

A minimum of 5.00 French credits taught in French is required, including FREN\*1200, FREN\*2020, FREN\*2030, FREN\*2060, FREN\*2520, FREN\*3520.

### Major (Honours Program)

A minimum of 8.00 French credits taught in French is required, including:

- FREN\*1200, FREN\*2020, FREN\*2030, FREN\*2060, FREN\*2520, FREN\*3230
- at least 0.50 credits from FREN\*2500, FREN\*2540
- at least 2.00 additional credits from FREN\*3000, FREN\*3010, FREN\*3020, FREN\*3070, FREN\*3150, FREN\*3200, FREN\*3210, FREN\*3220, FREN\*3240, FREN\*3290, FREN\*3560
- at least 1.00 credits from FREN\*3500, FREN\*3520, FREN\*3530
- at least 1.50 credits at the 4000 level

## Minor (Honours Program)

A minimum of 5.00 French credits taught in French is required, including:

- FREN\*1200, FREN\*2020, FREN\*2030, FREN\*2060, FREN\*2520, FREN\*3520
- 1.00 credits in French literature from FREN\*3000, FREN\*3010, FREN\*3020, FREN\*3070, FREN\*3240, FREN\*3290, FREN\*3560, FREN\*4300
- 1.00 additional credits from French

### Notes:

- Students are strongly urged to take 0.50 language credits each semester.
- Students in the general program may take 4000 level courses, but must previously have taken FREN\*3520.
- 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.
- FREN\*1000, FREN\*1090, FREN\*1100, FREN\*1150, FREN\*1120 are not counted toward a specialization in French.
- Native speakers of French (or non-francophone equivalent) will not normally be admitted into FREN\*1200 and FREN\*2030. It is recommended they start their program with FREN\*2020, FREN\*2060, FREN\*2500, or FREN\*2520 with the approval of the Faculty Advisor.

## Geography (GEOG)

### Department of Geography, College of Social and Applied Human Sciences

The Department of Geography 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 honours program should consult a departmental 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 Minor 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. honours Majors are eligible to take the B.SC. Minor. All Geography students are encouraged to consult with a departmental advisor regarding course selection.

The following courses offered by the Department of Land Resource Science may be counted as Geography credits: GEOL\*2150, MET\*2030, SOIL\*2010.

### Area of Concentration (General Program)

A minimum of 5.00 credits in Geography is required, including:

GEOG*1200	[0.50]	Society and Space
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*1300	[0.50]	Introduction to the Biophysical Environment

Two of:

GEOG*2000	[0.50]	Geomorphology
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2210	[0.50]	Environment and Resources
GEOG*2230	[0.50]	Economic Geography
GEOG*2260	[0.50]	Applied Social Geography

One of:

GEOG*2460	[0.50]	Analysis in Geography
GEOG*2480	[0.50]	Mapping and GIS

2.00 credits at the 3000 level or above

### Major (Honours Program)

A minimum of 9.00 credits in Geography is required, including:

GEOG*1200	[0.50]	Society and Space
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
GEOG*2000	[0.50]	Geomorphology
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2210	[0.50]	Environment and Resources
GEOG*2230	[0.50]	Economic Geography
GEOG*2260	[0.50]	Applied Social Geography
GEOG*2460	[0.50]	Analysis in Geography
GEOG*2480	[0.50]	Mapping and GIS
GEOG*3480	[0.50]	GIS and Spatial Analysis
GEOG*4880	[0.50]	Contemporary Geographic Thought

3.00 additional credits in Geography 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:

Two of:

GEOG*1200	[0.50]	Society and Space
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*1300	[0.50]	Introduction to the Biophysical Environment

Two of:

GEOG*2000	[0.50]	Geomorphology
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2210	[0.50]	Environment and Resources
GEOG*2230	[0.50]	Economic Geography
GEOG*2260	[0.50]	Applied Social Geography

3.00 credits in Geography at the 3000 level and including at least one course at the 4000 level.

## German (GERM)

### School of Languages and Literatures, College of Arts

All language courses carry 0.50 credits. Students with one year of high school German or equivalent may not be admitted into GERM\*1100. Students with OAC German may not be admitted into GERM\*1100 and GERM\*1110. Students with OAC German credit or its equivalent may be admitted into GERM\*1110 only with the approval of the department. 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 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. Requests should be addressed well in advance to either the department or a particular section of the department. A letter of permission is required (see the Section VIII--Undergraduate Degree Regulations & Procedures).

## Minor (Honours Program)

A minimum of 5.00 credits in German is required, including:

GERM*2240	[0.50]	Germany Through the Ages
GERM*2490	[0.50]	Intermediate German I
GERM*2500	[0.50]	Intermediate German II
GERM*2560	[0.50]	Themes in German Literature/Culture
GERM*2590	[0.50]	Classics of German Literature
GERM*3500	[0.50]	Advanced German

2.00 credits from (GERM\*1100 or GERM\*1110), GERM\*2400, GERM\*3020, GERM\*3420, GERM\*3430, GERM\*3450, GERM\*3530

Note that for students beginning with GERM\*1100 or GERM\*1110 a maximum of 2.50 language credits is allowed. For students with OAC German or equivalent, a maximum of 2.00 language credits is allowed. Language courses beyond the 1000 level include GERM\*2490, GERM\*2500, GERM\*3500, GERM\*3530.

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

- HIST\*1010, HIST\*2100, HIST\*2450, HIST\*2600
- 0.50 credits from each of a) Pre-Modern; b) Developing World; and c) Thematic. 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:

- at least 1.50 credits in History must be at the 3000 level (excluding HIST\*3470 )
- students should take the History Core Requirements

**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\*4600, WMST\*4010.

## Major (Honours Program)

A minimum of 8.00 credits in History courses is required, including:

- the History Core Requirements
- 4.50 additional credits in History including 1.00 at the 4000 level (excluding HIST\*4470 and HIST\*4970 ) and an additional 0.50 credits at the 4000 level which may include either HIST\*4470 or HIST\*4970

## Minor (Honours Program)

A minimum of 5.00 credits in History is required, including:

- the History Core Requirements
- 1.50 other credits in History including 1.00 at the 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\*4600, WMST\*4010. 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.

## 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:**

- minimum of 9.00 credits
- minimum of 4.00 credits at the 3000 level and above, including at least 1.00 credits at the 4000 level
- minimum of 1.00 credits in methods and/or theory
- maximum of 1.50 credits at the 1000 level
- 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 clear statement of theme or areas of study
- a clear statement of the contribution of the major to a post-graduation field of work or study
- a clearly set out rationale for inclusion of the specific courses and how they relate to or develop the theme or areas of study
- 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.

## Information Systems and Human Behaviour (ISHB)

### Interdisciplinary Program

As computers and communications play progressively more subtle and significant roles in society, this program of study brings together the elements of 3 disciplines to provide students with an understanding of technical, behavioural and social aspects of information technology. This program of study is a co-operative effort of the Department of Computing and Information Science, Department of Psychology, and Department of Sociology and Anthropology. Students in this program will be advised by the program coordinator in the Department of Psychology.

## Major (Honours Program)

### Computing and Information Science Courses

CIS*1500	[0.50]	Introduction to Programming
CIS*1910	[0.50]	Discrete Structures in Computing I
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
CIS*2910	[0.50]	Discrete Structures in Computing II
CIS*3530	[0.50]	Data Base Systems and Concepts
CIS*3750	[0.75]	System Analysis and Design in Applications
CIS*4300	[0.50]	Human Computer Interaction

### Psychology Courses

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
PSYC*2360	[0.50]	Introductory Research Methods
PSYC*2390	[0.50]	Principles of Sensation and Perception
PSYC*2650	[0.50]	Cognitive Psychology

PSYC*3080	[0.50]	Organizational Psychology
One of:		
SOAN*2040	[0.50]	Globalization of Work and Organizations
PSYC*2310	[0.50]	Introduction to Social Psychology
One of:		
PSYC*3330	[0.50]	Memory
PSYC*3340	[0.50]	Psycholinguistics

0.50 electives from a 4000 level Psychology course

### Sociology and Anthropology Courses

ANTH*1150	[0.50]	Introduction to Anthropology
SOC*1100	[0.50]	Sociology
SOC*2190	[0.50]	Technology and Society
SOAN*3070	[0.50]	Qualitative and Observational Methods

0.50 electives from a 4000 level course in ANTH, SOAN or SOC

### Statistics Courses

STAT*2040	[0.50]	Statistics I
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## International Development (ID)

### Interdisciplinary Program

**Faculty Advisor: Room 045 MacKinnon Building, ext 56175.**

The International Development program provides students with an opportunity to pursue interdisciplinary and comparative studies of long-term change and international inequality.

A broad coverage of the process of international development, from the perspectives of history and social science, forms the basis for more in-depth study on such topics as economic growth, the biophysical environment, gender, agriculture and rural life, politics and administration, and the Latin American region.

The primary participating departments are Economics, Geography, Political Science, and Sociology and Anthropology.

### Area of Concentration (General Program)

A minimum of 5.00 credits is required, including:

ANTH*1150	[0.50]	Introduction to Anthropology
ECON*1050	[0.50]	Introductory Microeconomics
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2650	[0.50]	Introductory Development Economics
GEOG*2030	[0.50]	International Political Geography
GEOG*3050	[0.50]	Development and the City
IDEV*2010	[0.50]	International Development Studies
POLS*2080	[0.50]	Development and Underdevelopment

One of:

ECON*3720	[0.50]	History of the World Economy Since 1850
ECON*3730	[0.50]	Europe and the World Economy to 1914

One of:

POLS*3670	[0.50]	Comparative Public Policy and Administration
POLS*3790	[0.50]	The Political Economy of International Relations

### Major (Honours Program)

A minimum of 12.00 credits is required, including the core of 7.00 credits and one of seven areas of emphasis for 5.00 credits. The areas are: Economic and Business Development, Gender and Development, Rural and Agricultural Development, Biophysical Environment and Development, Latin American Studies, Political Economy and Administrative Change, and Historical Perspectives in Development. Students must select an area of emphasis by the end of the 4th semester of university study.

International Development students are encouraged to acquire at least one foreign language and to work or study abroad.

With the permission of the International Development Studies faculty advisor, students may replace 0.50 credits from their area of emphasis with IDEV\*3200, or 1.00 credits from their area of emphasis with IDEV\*4190 and IDEV\*4200.

**Note:** When selecting courses, students should keep in mind the prerequisites for their desired 3000 and 4000 level courses.

### Core Requirements

ANTH*1150	[0.50]	Introduction to Anthropology
ECON*1050	[0.50]	Introductory Microeconomics
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2650	[0.50]	Introductory Development Economics
GEOG*2030	[0.50]	International Political Geography
GEOG*3050	[0.50]	Development and the City
IDEV*2010	[0.50]	International Development Studies *
IDEV*4500	[0.75]	International Development Seminar **
POLS*2080	[0.50]	Development and Underdevelopment

One of:

IDEV*3010	[0.50]	Case Studies in International Development
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0.50 credits from an approved semester abroad or exchange program

One of:

HIST*2930	[0.50]	Women and Cultural Change
SOAN*2400	[0.50]	Introduction to Gender Systems

WMST*1000	[0.50]	Introduction to Women's Studies
WMST*2000	[0.50]	Women and Representation
One of:		
ECON*3720	[0.50]	History of the World Economy Since 1850
ECON*3730	[0.50]	Europe and the World Economy to 1914
One of:		
ANTH*2160	[0.50]	Social Anthropology ***
REXT*4020	[0.50]	Rural Extension in Change and Development
SOC*2080	[0.50]	Rural Sociology ****

One of:

POLS*3670	[0.50]	Comparative Public Policy and Administration
POLS*3790	[0.50]	The Political Economy of International Relations

\* students must complete IDEV\*2010 before Semester 5

\*\* students normally complete IDEV\*4500 in their final year of study

\*\*\* ANTH\*2160 is recommended for the Gender area of emphasis

\*\*\*\* SOC\*2080 is recommended for the Rural area of emphasis

## Areas of Emphasis

### Biophysical Environment and Development

GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
GEOG*2210	[0.50]	Environment and Resources
GEOG*3210	[0.50]	Management of the Biophysical Environment
GEOG*4210	[0.50]	Environmental Resource Analysis

One of:

AGEC*2700	[0.50]	Survey of Natural Resource Economics
ANTH*3670	[0.50]	Indigenous Peoples: Global Context
ECON*2100	[0.50]	Economic Growth and Environmental Quality
HIST*2250	[0.50]	Environment and History
PHIL*2070	[0.50]	Philosophy of the Environment
POLS*3370	[0.50]	Environmental Policy Formation and Administration
SOC*2280	[0.50]	Society and Environment

One of:

GEOG*2000	[0.50]	Geomorphology
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2460	[0.50]	Analysis in Geography
GEOG*2480	[0.50]	Mapping and GIS

Two of:

GEOG*3020	[0.50]	Global Environmental Change
GEOG*3090	[0.50]	Gender and Environment
GEOG*3110	[0.50]	Biotic and Natural Resources
GEOG*3320	[0.50]	Agriculture and Society
GEOG*3480	[0.50]	GIS and Spatial Analysis
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*3620	[0.50]	Desert Environments

0.50 additional credits at the 4000 level with a GEOG prefix

### Economic and Business Development

AGEC*2220	[0.50]	Financial Accounting
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2740	[0.50]	Economic Statistics *

Two of:

AGEC*4310	[0.50]	Resource Economics
ECON*4720	[0.50]	Topics in Economic History
ECON*4830	[0.50]	Economic Development
ECON*4880	[0.50]	Topics in International Economics
ECON*4890	[0.50]	History of Economic Thought
ECON*4900	[0.50]	Special Study in Economics
ECON*4930	[0.50]	Environmental Economics

1.50 additional credits at the 2000 level or above in AGECECON, at least 0.50 being in ECON and at least 1.00 being at the 3000 level or above.

0.50 additional credits with a regional focus at the 2000 level or above in ANTH, GEOG, HIST, IDEV, ISS, POLS, SOAN or SOC.

\* Entry into ECON\*2740 requires one of MATH\*1000, MATH\*1050, MATH\*1080, MATH\*1200.

### Gender and Development

ANTH*2230	[0.50]	Regional Ethnography
SOAN*2120	[0.50]	Introductory Methods
SOAN*4240	[0.50]	Women and the Development Process

One of the following not taken as part of the core:

ANTH*2160	[0.50]	Social Anthropology
SOAN*2040	[0.50]	Globalization of Work and Organizations
SOC*2080	[0.50]	Rural Sociology

One of:

SOAN*3070	[0.50]	Qualitative and Observational Methods
SOAN*3120	[0.50]	Quantitative Methods

Two of:

ANTH*3400	[0.50]	The Anthropology of Gender
ANTH*3670	[0.50]	Indigenous Peoples: Global Context
ANTH*3690	[0.50]	History of Anthropological Thought
ANTH*3770	[0.50]	Kinship and Social Organization
ANTH*3840	[0.50]	Seminar in Anthropology
SOAN*3100	[0.50]	Comparative Perspectives on Families and Households

Two of the following not taken as part of the core, at least 0.50 credits being at the 3000 level:

ENGL*2880	[0.50]	Women in Literature
GEOG*3090	[0.50]	Gender and Environment
HIST*2800	[0.50]	The History of the Modern Family
HIST*2930	[0.50]	Women and Cultural Change
HIST*3580	[0.50]	Women's History in Asia
PHIL*2060	[0.50]	Philosophy of Feminism I
POLS*3160	[0.50]	Women and Politics in the Third World
POLS*3710	[0.50]	Politics and Sexuality

0.50 credits in WMST

0.50 additional credits at the 4000 level in ANTH, SOAN, or SOC

### Historical Perspectives in Development

HIST*2450	[0.50]	The Practicing Historian
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One of:

HIST*1010	[0.50]	Europe and the Early Modern World
HIST*1150	[0.50]	20th-Century Global History

Two of:

HIST*2070	[0.50]	World Religions in Historical Perspective
HIST*2110	[0.50]	The Atlantic World 1500-1850
HIST*2250	[0.50]	Environment and History
HIST*2500	[0.50]	Britain and the World Since 1600
HIST*2800	[0.50]	The History of the Modern Family
HIST*2890	[0.50]	History of the Islamic World
HIST*2910	[0.50]	History of Modern Asia
HIST*2920	[0.50]	Republican Latin America
HIST*2960	[0.50]	Topics in the History of Slavery

Three of the following not taken as part of the core:

ECON*2420	[0.50]	Canadian Economic History
ECON*3720	[0.50]	History of the World Economy Since 1850
ECON*3730	[0.50]	Europe and the World Economy to 1914
HIST*3070	[0.50]	Modern South Asia
HIST*3150	[0.50]	History and Culture of Mexico
HIST*3270	[0.50]	Revolution in the Modern World
HIST*3310	[0.50]	Disease and History
HIST*3380	[0.50]	British Imperialism in Asia and Africa
HIST*3410	[0.50]	The History of Pre-Colonial Africa
HIST*3420	[0.50]	Colonial Latin America
HIST*3430	[0.50]	Topics in Environment and Society
HIST*3470	[0.50]	Independent Reading
HIST*3580	[0.50]	Women's History in Asia
HIST*3590	[0.50]	Culture and Society in South Asia
HIST*3910	[0.50]	Africa Since 1800

Two of:

HIST*4100	[0.50]	Africa and the Slave Trades
HIST*4120	[0.50]	Topics in Global History
HIST*4280	[0.50]	Poverty and Policy in the Victorian Age
HIST*4470	[0.50]	Special History Project Seminar I
HIST*4560	[0.50]	Topics in Revolution
HIST*4570	[0.50]	Topics in Revolution
HIST*4580	[0.50]	Topics in Revolution
HIST*4670	[0.50]	Seminar in Science and Society
HIST*4900	[0.50]	Imperialism and Nationalism in South Asia

0.50 additional credits with a regional focus at the 2000 level or above in ANTH, GEOG, IDEV, ISS, POLS, SOAN or SOC.

### Latin American Studies

SPAN*1110	[0.50]	Intermediate Spanish
SPAN*2000	[0.50]	Spanish Language I
SPAN*2010	[0.50]	Spanish Language II
SPAN*3500	[0.50]	Spanish Grammar and Composition I

One of:

POLS*3650	[0.50]	The Systematic Study of Politics
SOAN*2120	[0.50]	Introductory Methods

Two of:

HIST*2920	[0.50]	Republican Latin America
POLS*3080	[0.50]	Politics of Latin America
SPAN*2990	[0.50]	Hispanic Literary Studies
SPAN*3080	[0.50]	Spanish American Culture

Choose Option A or B

Option A:

Last Revision: August 22, 2006

Any 1.50 additional credits in SPAN at the 3000 level or above, at least 0.50 being at the 4000 level.

Option B:

Any 1.50 additional credits in ANTH, ECON, GEOG, HIST, IDEV, ISS, POLS, SOAN, or SOC with a focus on Latin America or the Caribbean at the 3000 level or above, at least 0.50 being at the 4000 level. The faculty advisor for International Development maintains a list of appropriate courses.

### Political Economy and Administrative Change

POLS*3650	[0.50]	The Systematic Study of Politics
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Two of:

POLS*2000	[0.50]	Political Theory
POLS*2100	[0.50]	The State in Comparative Perspective
POLS*2200	[0.50]	International Relations

One of the following not taken as part of core:

POLS*3160	[0.50]	Women and Politics in the Third World
POLS*3370	[0.50]	Environmental Policy Formation and Administration
POLS*3390	[0.50]	Comparative Democratic Institutions
POLS*3440	[0.50]	Corruption, Scandal and Political Ethics
POLS*3490	[0.50]	Conflict and Conflict Resolution
POLS*3670	[0.50]	Comparative Public Policy and Administration
POLS*3790	[0.50]	The Political Economy of International Relations

Two of the following not taken as part of the core:

AGEC*4310	[0.50]	Resource Economics
ECON*2100	[0.50]	Economic Growth and Environmental Quality
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2720	[0.50]	Business History
ECON*3720	[0.50]	History of the World Economy Since 1850
ECON*3730	[0.50]	Europe and the World Economy to 1914
ECON*4720	[0.50]	Topics in Economic History
ECON*4830	[0.50]	Economic Development
ECON*4890	[0.50]	History of Economic Thought

1.00 additional credits in POLS at the 4000 level

1.00 additional credits with a regional focus at the 2000 or 3000 level in HIST or POLS, at least 0.50 being in POLS.

### Rural and Agricultural Development

SOAN*2120	[0.50]	Introductory Methods
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One of the following not taken as part of the core:

ANTH*2160	[0.50]	Social Anthropology
ANTH*2230	[0.50]	Regional Ethnography
SOC*2080	[0.50]	Rural Sociology

One of:

GEOG*3480	[0.50]	GIS and Spatial Analysis
SOAN*3070	[0.50]	Qualitative and Observational Methods
SOAN*3120	[0.50]	Quantitative Methods

Two of the following not taken as part of the core:

AGEC*4210	[0.50]	World Agriculture and Economic Development
ANTH*3670	[0.50]	Indigenous Peoples: Global Context
ANTH*3690	[0.50]	History of Anthropological Thought
SOAN*3680	[0.50]	Development/Underdevelopment
SOC*3380	[0.50]	Society and Nature

Any REXT courses at the 3000 level or above.

One of:

AGEC*2700	[0.50]	Survey of Natural Resource Economics
AGR*1250	[0.50]	Agrifood System Trends & Issues
AGR*2500	[0.50]	Field Trip in International Agriculture
BOT*1200	[0.50]	Plants and Human Use
ENVB*2010	[0.50]	Food Production and the Environment
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
GEOG*1350	[0.50]	Earth: Hazards and Global Change
SOIL*2120	[0.50]	Introduction to Environmental Stewardship

One of:

GEOG*2000	[0.50]	Geomorphology
SOIL*2010	[0.50]	Soil Science *

0.50 additional credits at the 3000 or 4000 levels in AGR, CROP, ENVB, GEOL, HORT, SOIL or any biophysical course in GEOG.

1.00 additional credits in ANTH, SOAN or SOC at the 4000 level.

\* SOIL\*2010 is needed for senior GEOL and SOIL courses relevant to this area.

### Minor (Honours Program)

A minimum of 5.50 credits is required, including:

ANTH*1150	[0.50]	Introduction to Anthropology
ECON*1050	[0.50]	Introductory Microeconomics
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2650	[0.50]	Introductory Development Economics
GEOG*2030	[0.50]	International Political Geography
GEOG*3050	[0.50]	Development and the City

IDEV*2010	[0.50]	International Development Studies
POLS*2080	[0.50]	Development and Underdevelopment
SOAN*3680	[0.50]	Development/Underdevelopment
One of:		
ECON*3720	[0.50]	History of the World Economy Since 1850
ECON*3730	[0.50]	Europe and the World Economy to 1914
One of:		
POLS*3670	[0.50]	Comparative Public Policy and Administration
POLS*3790	[0.50]	The Political Economy of International Relations

### Italian (ITAL)

#### School of Languages and Literatures, College of Arts

All language courses carry 0.50 credits. Students with Year 4 or OAC Italian or their equivalent may be admitted into ITAL\*1060 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 (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:

- ITAL\*2060, ITAL\*2070, ITAL\*3060
- two of the following courses ITAL\*2100, ITAL\*3150, ITAL\*3200
- 1.50 additional credits from List A
- at least 1.00 credits from List B

#### List A

ITAL*1060	[0.50]	Introductory Italian I
ITAL*1070	[0.50]	Introductory Italian II
ITAL*2100	[0.50]	Renaissance Lovers and Fools
ITAL*3150	[0.50]	Medieval Italian Literature
ITAL*3200	[0.50]	Novels of Resistance
ITAL*3950	[0.50]	Topics in Italian Literature
ITAL*3960	[0.50]	Topics in Italian Literature
ITAL*3970	[0.50]	Topics in Italian Literature
ITAL*4900	[0.50]	Research Paper in Italian Studies

#### List B

ARTH*2540	[0.50]	Medieval Art
ARTH*2550	[0.50]	The Italian Renaissance
ARTH*2950	[0.50]	Baroque Art
ARTH*3100	[0.50]	Perspectives: Structure and Space in Renaissance and Baroque Art
ARTH*3150	[0.50]	Space: Roman Art and Urbanism
ARTH*3540	[0.50]	Image: The Arts in the Medieval Era
ARTH*3550	[0.50]	Lives: Aspects of High Renaissance Art
ARTH*3640	[0.50]	Objects: Baroque Art and Rococo 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]	History of Greece and Rome
HIST*3750	[0.50]	The Reformation
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]	History of Greek and Roman Philosophy
PHIL*3060	[0.50]	Medieval Philosophy

### Marketing Management (MKMN)

#### Department of Marketing and Consumer Studies, College of Social and Applied Human Sciences

A Marketing Management minor is designed for students who wish to pursue interdisciplinary studies that consider consumers and the marketplace, consumers and their decision processes and behaviours, markets and their structure and various interactive relationships, and issues concerning market management.

Students who wish to declare the Marketing Management Minor specialization must apply directly to the Department. In order to be eligible, applicants must have a cumulative average of 70% or better in all course attempts towards the minor.

### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

AGEC*2220	[0.50]	Financial Accounting
ECON*1050	[0.50]	Introductory Microeconomics
ECON*1100	[0.50]	Introductory Macroeconomics
MCS*1000	[0.50]	Introductory Marketing
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour

One of:

HTM*2200	[0.50]	Organizational Behaviour I
ISS*2500	[0.50]	Management in Organizations

2.00 restricted electives from the list of Restricted Electives, 1.00 of which must be at the 3000 or 4000 level

### Restricted Electives

AGEC*4360	[0.50]	Marketing Research
AGEC*4370	[0.50]	Marketing Management
ECON*2200	[0.50]	Industrial Relations
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2720	[0.50]	Business History
ECON*3200	[0.50]	Economics of Industrial Relations
ECON*3560	[0.50]	Theory of Finance
MCS*2020	[0.50]	Information Management
MCS*3020	[0.50]	Services Marketing
MCS*3030	[0.50]	Research Methods
MCS*3040	[0.50]	Business and Consumer Law
MCS*3100	[0.50]	Economic Behaviour of Households
MCS*3600	[0.50]	Consumer Information Processes
MCS*4050	[0.50]	The Evolution of Capitalism: A Canadian Perspective

One of:

ECON*2740	[0.50]	Economic Statistics
STAT*2060	[0.50]	Statistics for Business Decisions

### Mathematical Economics (MAEC)

#### Department of Economics, College of Social and Applied Human Sciences

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.

**Note:** Students approaching the end of their program are strongly advised to take, by arrangement with the departmental advisor, at least one of the Special Study in Economics courses (ECON\*4900, ECON\*4910).

### 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
1.50 electives		

#### Semester 3

ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2410	[0.50]	Intermediate Macroeconomics
STAT*2040	[0.50]	Statistics I
1.00 electives		

#### Semester 4

ECON*3740	[0.50]	Introduction to Econometrics
2.00 electives or restricted electives*		

#### Semester 5

ECON*3710	[0.50]	Advanced Microeconomics
2.00 electives or restricted electives*		

#### Semester 6

ECON*3100	[0.50]	Game Theory
ECON*3600	[0.50]	Macroeconomics in an Open Economy
1.50 electives or restricted electives*		

#### Semester 7

ECON*4640	[0.50]	Applied Econometrics I
ECON*4710	[0.50]	Advanced Topics in Microeconomics
ECON*4870	[0.50]	Mathematical Economics: Dynamics
1.00 electives or restricted electives*		

**Semester 8**

ECON\*4810 [0.50] Advanced Macroeconomic Theory

ECON\*4900 [0.50] Special Study in Economics

One of:

ECON\*4840 [0.50] Applied Econometrics II

MATH\*3200 [0.50] Real Analysis

STAT\*4080 [0.50] Data Analysis

STAT\*4340 [0.50] Statistical Inference

STAT\*4350 [0.50] Applied Multivariate Statistical Methods

STAT\*4360 [0.50] Applied Time Series Analysis

1.00 electives

\*at least 1.00 of the 4.00 restricted electives must be from Mathematics and 1.00 must be from Statistics. The remaining 2.00 can be from either subject area. Of the 4.00 credits, at least 1.00 must be at the 3000 level or above and the remaining 3.00 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.

**Mathematics (MATH)****Department of Mathematics and Statistics, College of Physical and Engineering Science**

Mathematics and Statistics have become crucial components in the understanding and exploration of more and more disciplines. Persons with a strong background in mathematical sciences have access to a broad range of rewarding opportunities. Within the B.A. program, the Department of Mathematics and Statistics offers areas of concentration, majors and minors, both in Mathematics and Statistics. The Mathematics programs are designed to provide considerable flexibility for students to pursue their own interests, whether they be in the concepts of "pure" mathematics or techniques and applications. As a result, these programs open up opportunities for careers in many sectors such as business, education, government, industry, or medicine.

**Area of Concentration (General Program)**

A minimum of 5.00 Mathematics credits is required, including:

- 4.00 credits in Mathematics, including at least 1.00 from courses at the 3000 level or above
- 1.00 additional credits from Mathematics, Statistics and/or Computing Science

**Honours Programs**

Students without 4U Advanced Function and Calculus or OAC Calculus should consult with the departmental advisor. Students without 4U Geometry and Discrete Mathematics or OAC Algebra and Geometry should take MATH\*2150 and then MATH\*2160.

**Core Requirements for Honours**

MATH\*1200 [0.50] Calculus I

MATH\*1210 [0.50] Calculus II

MATH\*2000 [0.50] Set Theory

MATH\*2160 [0.50] Linear Algebra I

MATH\*2200 [0.50] Advanced Calculus I

**Note:** For both a major and a minor, it is strongly recommended that PHIL\*2110 be included as an elective and be taken as early as possible.

**Major (Honours Program)**

A minimum of 8.00 credits is required, including:

- the Mathematics core requirements
- MATH\*2210
- MATH\*3200
- STAT\*2040
- 0.50 credits in Statistics
- 0.50 credits in Computing Science (from CIS\*1500 or higher)
- 3.00 additional credits in Mathematics from courses at the 2000 level or above, including 1.00 at the 3000 level and 1.00 at the 4000 level

**Minor (Honours Program)**

A total of 5.00 credits is required to complete the Minor including:

2.50 credits from (MATH\*1080 or MATH\*1200), (MATH\*1210 or MATH\*2080), MATH\*2000, (MATH\*2150 or MATH\*2160), MATH\*2200

0.50 STAT credits at the 2000 level or above

2.00 additional Mathematics credits at the 2000 level or above, including 1.50 credits at the 3000 or 4000 level

**Museum Studies (MS)****School of Fine Art and Music**

The Minor program in Museum Studies offers an introduction to museum culture from both theoretical and practical perspectives. Courses in the program cover the history of museums, examination of assumptions that have guided the collecting and classifying of

visual culture, and consideration of how these institutions serve the needs of national and group identity construction.

This program of study is designed as a complement to a significant number of Major specializations, suitable for any student wishing to broaden their knowledge beyond their Major area of study.

**Minor (Honours Program)**

**(May not be taken in combination with Art History Honours Major).**

A minimum of 5.00 credits is required, including:

a. ARTH\*1220 [0.50] The Visual Arts Today

ARTH\*1510 [0.50] Art Historical Studies I

ARTH\*1520 [0.50] Art Historical Studies II

b. 3.50 additional credits in Art History including:

ARTH\*2120 [0.50] Introduction to Museology

ARTH\*2480 [0.50] Introduction to Art Theory and Criticism

ARTH\*3220 [0.50] Nationalism and Identity in Art

ARTH\*3570 [0.50] Display: Visual Culture in Late 19th Century Europe

ARTH\*4620 [0.50] Museum Studies

**Music (MUSC)****School of Fine Art and Music, College of Arts**

The School offers courses in music history, theory, ethnomusicology, and performance. Many courses are open to all students, while others require a knowledge of the rudiments of musical notation or other prerequisites. Students are urged to plan their program in consultation with a Music advisor. Music programs allow considerable flexibility for students to elect one or more areas of interest, such as individual study on an instrument, performing in vocal or instrumental ensembles, specialized historical or theoretical study, directed readings, or an independent project. Physics of Music (MUSC\*1090) is strongly recommended for all Music students and will count as one of the courses for the B.A. math/science requirement.

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. Students who wish to continue to the 2000 level in Applied Music must be enrolled in a Music program, general program; area of concentration; honours program, major or minor.

*Applied Music courses are designed to be taken during successive Fall and Winter terms. If this sequence is interrupted for a semester or more, students will be required to reaudition 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 the general program area of concentration and honours program major must complete the following courses:

MUSC\*1180 [0.50] Musicianship I

MUSC\*1250 [0.50] Melody and Counterpoint

MUSC\*2360 [0.50] Tonal Harmony I

MUSC\*2370 [0.50] Tonal Harmony II

MUSC\*2600 [0.50] Music History: Chant to Josquin

MUSC\*2610 [0.50] Music History: The Reformation to J.S. Bach

MUSC\*2620 [0.50] Music History: Classical and Romantic Eras

MUSC\*3630 [0.50] 20th Century Music

**Area of Concentration (General Program)**

A minimum of 6.00 Music credits is required, including:

- the Music core
- at least 1.00 Music credits at the 3000 level or above

**Major (Honours Program)**

A minimum of 8.00 Music credits is required, including:

- the Music core
- one of MUSC\*2140, MUSC\*2110, MUSC\*2200
- one of MUSC\*3020, MUSC\*3030, MUSC\*3840, MUSC\*3850
- one of MUSC\*3800, MUSC\*3810
- MUSC\*4401/2

*Participation in Applied Music courses and/or performing ensembles is strongly recommended for all honours students. Students contemplating graduate studies in Music should consult music faculty early in their program.*

**Minor (Honours Program)**

A minimum of 5.00 Music credits is required, including at least 2.00 Music credits at the 3000 or 4000 level.

## Course Groups

Students who wish to concentrate in particular areas of Music should consider selecting one of the following course groups:

### Jazz, Popular, and World Music Studies

MUSC*1180	[0.50]	Musicianship I
MUSC*2140	[0.50]	History of Jazz
MUSC*2150	[0.50]	Music and Popular Culture
MUSC*2180	[0.50]	Musicianship II
MUSC*3820	[0.50]	Topics in Ethnomusicology

One of:

MUSC*2110	[0.50]	Music of the Circum-Atlantic and the Americas
MUSC*2200	[0.50]	Music of the Near and Far East

One of:

MUSC*2610	[0.50]	Music History: The Reformation to J.S. Bach
MUSC*2620	[0.50]	Music History: Classical and Romantic Eras

1.50 other music credits at the 3000 or 4000 level (MUSC\*1250 and MUSC\*2360 are highly recommended)

### Theory and Analysis

MUSC*1180	[0.50]	Musicianship I
MUSC*1250	[0.50]	Melody and Counterpoint
MUSC*2360	[0.50]	Tonal Harmony I
MUSC*2370	[0.50]	Tonal Harmony II

One of:

MUSC*2610	[0.50]	Music History: The Reformation to J.S. Bach
MUSC*2620	[0.50]	Music History: Classical and Romantic Eras
MUSC*3630	[0.50]	20th Century Music

One of:

MUSC*3020	[0.50]	Tonal Analysis
MUSC*3030	[0.50]	Post-tonal Analysis

1.50 other Music credits at the 3000 or 4000 level

### History and Literature

MUSC*1180	[0.50]	Musicianship I
MUSC*1250	[0.50]	Melody and Counterpoint
MUSC*2360	[0.50]	Tonal Harmony I

Three of:

MUSC*2600	[0.50]	Music History: Chant to Josquin
MUSC*2610	[0.50]	Music History: The Reformation to J.S. Bach
MUSC*2620	[0.50]	Music History: Classical and Romantic Eras
MUSC*3630	[0.50]	20th Century Music

2.00 other Music credits at the 3000 or 4000 level

### Applied Music

MUSC*1180	[0.50]	Musicianship I
MUSC*1500	[0.50]	Applied Music I
MUSC*1510	[0.50]	Applied Music II
MUSC*2180	[0.50]	Musicianship II

One of:

MUSC*2600	[0.50]	Music History: Chant to Josquin
MUSC*2610	[0.50]	Music History: The Reformation to J.S. Bach
MUSC*2620	[0.50]	Music History: Classical and Romantic Eras
MUSC*3630	[0.50]	20th Century Music

0.50 credits from one of the following 2 sets of 2 courses:

MUSC*2530	[0.25]	Instrumental Ensembles I
MUSC*2540	[0.25]	Instrumental Ensembles II

OR

MUSC*2550	[0.25]	Choral Ensembles I
MUSC*2560	[0.25]	Choral Ensembles II

2.00 other Music credits at the 3000 or 4000 level

Honours students considering graduate work in ethnomusicology, performance, theory, and other music specializations should consult the School Director or an academic adviser early in their program. Students should take MUSC\*2290, MUSC\*2350, MUSC\*3020, MUSC\*3030, MUSC\*3750 and Topics courses (MUSC\*3800 to MUSC\*3850) covering a broad range of historical periods and methodologies, and also consider courses in Humanities (HUMN), dramatic theory, art history, anthropology, and English literature. A reading knowledge of at least one language other than English is also recommended.

## Organizational Behaviour (OBEH)

### Department of Psychology, College of Social and Applied Human Sciences

The study of behaviour and the behavioural processes of individuals and groups within organizations is an especially important focus for those interested in human welfare and productivity. The Minor in Organizational Behaviour is for students seeking to broaden their knowledge beyond their major area of study and may be of particular value for those interested in the dynamics of organizational structures within the private and/or public domains. Although this program should provide a meaningful complement for a significant number of Major options, the program might be of particular interest to those students considering a future management and/or business career.

## Minor (Honours Program)

### (May not be taken in combination with a Psychology Honours Major)

A minimum of 6.00 credits is required, including:

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
2.00 credits in 4 Psychology Core Courses, to include PSYC*2310		
PSYC*2010	[0.50]	Quantification in Psychology
PSYC*3060	[0.50]	Occupational Health Psychology
PSYC*3070	[0.50]	Psychology in Human Resource Management
PSYC*3080	[0.50]	Organizational Psychology
PSYC*3250	[0.50]	Psychological Measurement

0.50 additional credits in Psychology

Students should note the availability of courses PSYC\*3900 and PSYC\*3910 when considering potential Psychology electives which would fulfil this requirement. When selecting open electives for completion of the degree, students with this minor should consider selecting the following courses: HTM\*4390 and SOAN\*2040.

**Note:** Courses designated with (H) in Section XII--Course Descriptions are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology.

## Philosophy (PHIL)

### Department of Philosophy, College of Arts

The Department of Philosophy offers programs emphasizing the history of philosophy and the study of metaphysics, epistemology, ethics and logic. The requirements for the various Philosophy programs are designed to ensure a basic competence in the discipline while permitting varying degrees of flexibility. It is important that students discuss their programs with a departmental advisor 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\*1010 and PHIL\*1050 but only one may be counted towards the minimum number of Philosophy courses required for a degree.

### Area of Concentration (General Program)

A minimum of 5.00 credits in Philosophy is required, including:

- 1 of PHIL\*2140, PHIL\*2160, PHIL\*2170, PHIL\*3060, PHIL\*3080, PHIL\*3130, PHIL\*3200
- 1 of PHIL\*2110, PHIL\*2130, PHIL\*2180, PHIL\*3180, PHIL\*3190, PHIL\*3240, PHIL\*3250, PHIL\*3420, PHIL\*3910, PHIL\*3920, PHIL\*3930, PHIL\*4360, PHIL\*4370, PSYC\*3280
- 1 of PHIL\*2030, PHIL\*2060, PHIL\*2070, PHIL\*2120, PHIL\*2600, PHIL\*3040, PHIL\*3050, PHIL\*3230, PHIL\*4060, PHIL\*4310, PHIL\*4340
- 3.50 additional credits in Philosophy

**Note:** Students must have at least 1.50 Philosophy credits at the 3000 or 4000 level.

## Major (Honours Program)

A minimum of 8.50 credits is required, including:

- PHIL\*2110, PHIL\*2120, PHIL\*2140, PHIL\*2160, PHIL\*3080
- 2 of PHIL\*2170, PHIL\*2180, PHIL\*3180, PHIL\*3190, PHIL\*3240, PHIL\*3250, PHIL\*4360, PHIL\*4370, PSYC\*3280
- 2 of PHIL\*2060, PHIL\*3050, PHIL\*3230, PHIL\*4310, PHIL\*4340
- 2 of PHIL\*2030, PHIL\*2070, PHIL\*2130, PHIL\*2600, PHIL\*3130, PHIL\*3200, PHIL\*3420, PHIL\*3910, PHIL\*3920, PHIL\*3930, PHIL\*4060
- 3.00 additional credits in Philosophy

**Note:** Students must have at least 3.50 credits in Philosophy at the 3000 level or above, and at least 1.50 of these at the 4000 level.

Students planning to do graduate studies in philosophy should take PHIL\*2110, PHIL\*2120, PHIL\*2140, PHIL\*3080, PHIL\*3130, PHIL\*3200, PHIL\*4800.

## Minor (Honours Program)

A minimum of 5.00 credits in Philosophy is required, including:

- 1 of PHIL\*2140, PHIL\*2160, PHIL\*2170, PHIL\*3060, PHIL\*3080
- 1 of PHIL\*2110, PHIL\*2180, PHIL\*3180, PHIL\*3190, PHIL\*3240, PHIL\*3250, PHIL\*4360, PHIL\*4370, PSYC\*3280
- 1 of PHIL\*2060, PHIL\*2120, PHIL\*3050, PHIL\*3230, PHIL\*4310, PHIL\*4340
- 1 of PHIL\*2030, PHIL\*2070, PHIL\*2130, PHIL\*2600, PHIL\*3130, PHIL\*3200, PHIL\*3420, PHIL\*3910, PHIL\*3920, PHIL\*3930, PHIL\*4060
- 3.00 additional credits in Philosophy

**Note:** Students must have at least 3.50 credits in Philosophy at the 3000 level or above, and at least 1.50 of these at the 4000 level.

## 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: Theory and Analysis, Canada and the Americas, Public Policy and Administration, and Comparative

/ International Development. These areas are listed below to identify 3000 level courses that fulfill prerequisites for selected 4000 level courses (see course descriptions). A brochure describing each of these fields of study, and containing further course information, is available from the departmental office. The Department of Political Science also participates in several interdisciplinary programs, including European Studies and International Development 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\*3650. This course is also required for students in the honours program minor.

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

- POLS\*1150, POLS\*2000, POLS\*2300
- POLS\*2080 or POLS\*2100
- POLS\*2200 or POLS\*2250

### Area of Concentration (General Program)

A minimum of 5.00 credits in Political Science is required, including:

- the Political Science core
- 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 in Political Science is required, including:

- the Political Science core
- POLS\*3650
- at least 0.50 credits at the 3000 level in three of the four fields in the department
- 2.00 credits at the 4000 level, two of which may include the POLS\*4970/POLS\*4980 Honours Thesis \*\*

\*\* 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.

### Minor (Honours Program)

A minimum of 5.00 credits in Political Science is required, including:

- the Political Science core
- POLS\*3650
- 0.50 credits at the 4000 level

Choices for fulfillment of prerequisites for 4000 level courses (see course descriptions for corresponding requirements).

### 4000 Level Prerequisites

#### Political Theory and Analysis

POLS*3180	[0.50]	Political Inquiry and Analysis
POLS*3220	[0.50]	Classical Political Thought
POLS*3230	[0.50]	Modern Political Thought
POLS*3280	[0.50]	Modern Political Ideologies
POLS*3710	[0.50]	Politics and Sexuality

#### Canada and the Americas

POLS*3050	[0.50]	Canadian Political Parties, Elections and Pressure Groups
POLS*3110	[0.50]	Politics of Ontario
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*3330	[0.50]	Politics and Trade Liberalization in the Americas
POLS*3390	[0.50]	Comparative Democratic Institutions
POLS*3410	[0.50]	U.S. Politics and Government
POLS*3730	[0.50]	The Americas

#### Public Policy and Administration

POLS*3110	[0.50]	Politics of Ontario
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 Policy Formation and Administration
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
POLS*3930	[0.50]	Politics of the Agri-Food System
POLS*3940	[0.50]	Accountability and Canadian Government
<b>Comparative/International Development</b>		
POLS*3000	[0.50]	Politics of Africa
POLS*3060	[0.50]	Politics of the Middle East and North Africa
POLS*3070	[0.50]	The Politics of Asian Development
POLS*3080	[0.50]	Politics of Latin America
POLS*3160	[0.50]	Women and Politics in the Third World
POLS*3330	[0.50]	Politics and Trade Liberalization in the Americas
POLS*3390	[0.50]	Comparative Democratic Institutions
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*3460	[0.50]	Communism and Post-Communism
POLS*3490	[0.50]	Conflict and Conflict Resolution
POLS*3670	[0.50]	Comparative Public Policy and Administration
POLS*3730	[0.50]	The Americas
POLS*3790	[0.50]	The Political Economy of International Relations
POLS*3890	[0.50]	Government and Politics of India
POLS*3920	[0.50]	Modern China

The Department of Political Science offers a comprehensive counselling service for students in Political Science. As part of their program, the department also permits students to include 0.50 credits towards the general degree and 1.00 credits towards the honours degree from an approved list of courses offered by other departments.

Students are encouraged to consult with the departmental advisor for either of these programs about course selection, substitution of courses offered by other departments, or other matters.

### 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, a B.A. honours program major (co-op), and as an honours specialization in the B.SC. program (described in the schedule of studies for B.SC. programs). Through its different undergraduate programs, the Psychology Department attempts to provide 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 (e.g. social services); and c) a sound preparation for graduate study in psychology. Students intending to apply for admission to graduate programs in Psychology are advised to refer to the Graduate Advisory Note.

A cumulative average of at least 70% in all course attempts in Psychology is required to enter or continue in the Honours Psychology program major in semesters 4, 5, 6, 7, and 8.

### Minors

Students interested in a Minor in Psychology should examine the schedule of studies for the Minors in Cognitive Neuropsychology, Developmental Psychology, Educational Psychology, Organizational Behaviour, or Social Psychology. Within the BA Degree program, these are the only Honours Minors available from the Psychology Department. The department does not offer Psychology as an Honours BA Minor, or as an Area of Concentration in the General BA Program.

### Note on Honours Courses

Courses marked (H) are designed for students in a psychology honours program, the Information Systems and Human Behaviour program, the Developmental Psychology Minor program, the Educational Psychology Minor program, the Organizational Behaviour Minor program, the Social Psychology program, the Cognitive Neuropsychology Minor program, or Human Resources Management major of the Bachelor of Commerce program. Students in other programs wishing to take these courses must obtain the permission of the instructors concerned. Unless otherwise specified, all other courses may be taken by general, honours, and students from other programs, providing the prerequisites are met.

**Courses designated with (H) are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology, or registration in either the HRM Major or ISHB Major.**

### Core Requirements

Each of the Psychology programs requires that students complete at least 6 of the following 2000 level Psychology courses (3.00 credits). Psychology students are advised that they are normally expected to complete at least four 2000 level Psychology core courses prior to attempting any 3000 level Psychology courses.

However, students should take the 3000 level methodology courses PSYC\*3320(H), PSYC\*3370(H) and PSYC\*3380 (H) as early as possible, even though 4 core courses may not have been taken.

PSYC*2310	[0.50]	Introduction to Social Psychology
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PSYC*2330	[0.50]	Principles of Learning
PSYC*2390	[0.50]	Principles of Sensation and Perception
PSYC*2410	[0.50]	Behavioural Neuroscience I
PSYC*2450	[0.50]	Introduction to Developmental Psychology
PSYC*2650	[0.50]	Cognitive Psychology
PSYC*2740	[0.50]	Personality

### Major (Honours Program)

A minimum of 9.00 credits in Psychology is required, including (see notes below):

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
6 of the 2000 level Psychology core courses listed above		
PSYC*2010	[0.50]	Quantification in Psychology
PSYC*2360	[0.50]	Introductory Research Methods
PSYC*3250	[0.50]	Psychological Measurement
PSYC*3320	[0.50]	Statistical Principles in Psychological Research

1.50 additional credits at the 3000 level or above (Students electing to take PSYC\*3370 and PSYC\*3380 will need to select only 0.50 additional credits at the 3000 level or above in order to satisfy this requirement.) (see Graduate Advisory Note).

1.50 additional psychology credits at the 4000 level (See Graduate Advisory Note).

Notes:

1. PSYC\*2010 should normally be completed by the end of semester 3
2. PSYC\*2360 should normally be completed by the end of semester 4
3. PSYC\*3320 SHOULD NORMALLY BE COMPLETED BY THE END OF SEMESTER 4.
4. **NOTE: that PSYC\*3320 is a prerequisite for PSYC\*3370 and PSYC\*3380 and that PSYC\*3320 is an (H) designated course.**

**Note:** The regulations of the B.A. program govern the number of credits that must be taken at the 3000 level or above (see B.A. Program Regulations). With permission of the Psychology Department PRIOR to course selection, up to 1.00 non-psychology credits that would enhance the student's studies in Psychology, especially in preparation for post-graduate work, may be credited towards the total number of credits required for graduation in the honours program major in Psychology.

**Graduate Advisory Note:** Most graduate programs require the student to have at least a B+ average in order to be considered for admission. Students contemplating graduate work in Psychology are strongly advised to complete the major by completing 0.50 electives credits at the 3000 level or above and 0.50 elective credits at the 4000 level beyond PSYC\*4870 and PSYC\*4880 which would otherwise satisfy the 3000-4000 level elective requirement for the major.

These students are encouraged to complete the Psychology major as follows:

- a. PSYC\*1100 and PSYC\*1200
- b. 6 of the 2000 level Psychology core courses
- c. PSYC\*2010 and PSYC\*3320
- d. PSYC\*2360 and PSYC\*3370 and PSYC\*3380
- e. an additional 0.50 credits in Psychology at the 3000 level or above
- f. PSYC\*3250
- g. PSYC\*4370 or PSYC\*4900
- h. 0.50 electives at the 4000 level
- i. PSYC\*4870 plus PSYC\*4880

Students should note that an Honours Thesis is normally taken as a Fall-Winter sequence worth the equivalent of 1.50 credits toward the 20.00 credits Honours B.A. degree requirements.

### Psychology (Co-op) (PSYC:C)

#### Department of Psychology, College of Social and Applied Human Sciences

Co-operative Education formally integrates the student's academic study with 3 work terms (COOP\*1000, COOP\*2000, COOP\*3000) in co-operating employer organizations. The Co-op program is offered as a B.A. honours program major degree taken as one of two major options combined with 3 work terms. One of the options is recommended for Co-op students expecting to apply for admission to graduate studies in Psychology. (See Graduate Advisory Note.)

All Co-op students are strongly advised to complete the B.A. requirements by including in their program 3 or more courses from the listing of courses under Business Administration, to ensure that they have 1 or more courses in computer science, accounting and management, or organizational behaviour. (Business Administration is also available as a minor.) Although not required, Co-op students are strongly encouraged to select a minor as part of the program.

Depending on career aspirations, students should have a good working knowledge of one or more of the following before their first work semester: psychological measurement, quantitative methods, computer science, accounting and management, or organizational behaviour.

The first work term normally follows 3 or 4 semesters of academic study (see Section X-Co-operative Education Programs). Students must be eligible to continue in the Honours Psychology program in order to remain in the Co-op program.

Admission to the Co-op program is limited and will be based on academic background. Admission will normally be considered only at semester 1 entry or during semester 2 when the student selects courses for semester 3.

**Note:** Courses designated with (H) in Section XII--Course Descriptions are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology.

### Major (Honours Program) - Stream A

**The following Co-op schedule of studies is for students not intending to apply for admission to graduate programs in Psychology (includes 3 work terms).**

**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 and courses appropriate for potential work-term placements.

#### Semester 1 - Fall

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
1.50 electives*		

#### Semester 2 - Winter

COOP*1100	[0.00]	Introduction to Co-operative Education
PSYC*2010	[0.50]	Quantification in Psychology
0.50 Psychology core***		
1.50 electives*		

#### Summer Semester

Optional, however completion of semester 3 requirements NOW would allow for additional flexibility in the scheduling of future work terms (see also optional schedule below for students intending to apply for graduate programs).

#### Semester 3 - Fall

PSYC*3320	[0.50]	Statistical Principles in Psychological Research
1.50 Psychology core***		
0.50 electives*		

#### Winter Semester

COOP*1000	[0.00]	Co-op Work Term I
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#### Semester 4 - Summer

1.00 Psychology core  
1.50 electives\*\*\*\*

#### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Semester 5 - Winter

PSYC*2360	[0.50]	Introductory Research Methods
PSYC*3250	[0.50]	Psychological Measurement
0.50 Psychology credits at the 3000 or 4000 level**		
1.00 electives		

#### Summer Semester

COOP*3000	[0.00]	Co-op Work Term III
PSYC*4910	[0.50]	Co-operative Education Project I

#### Semester 6 - Fall

1.00 Psychology electives at the 3000 or 4000 level\*\*  
1.50 electives

#### Semester 7 - Winter

1.00 Psychology electives at the 3000 or 4000 level\*\*  
1.50 electives

#### Semester 8 - Summer\*\*\*\*\*

2.00 electives

\* B.A. distribution requirements should be satisfied within the first 4 semesters

\*\* at least two of these Psychology courses must be at the 4000 level

\*\*\* see Semester 4 requirements as not all core courses are available in the Summer Semester

\*\*\*\* PSYC\*2310 and PSYC\*2740 are normally available in the Summer Semester

\*\*\*\*\* the schedule for COOP\*3000 and semester 8 requirements can be exchanged

### Major (Honours Program) - Stream B

**The following Co-op schedule of studies is recommended for those students intending to apply for graduate work in Psychology (includes 3 work terms and 18 Psychology courses).**

#### Semester 1 - Fall

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
1.50 electives*		

#### Semester 2 - Winter

COOP*1100	[0.00]	Introduction to Co-operative Education
PSYC*2010	[0.50]	Quantification in Psychology

1.00 Psychology core (other than PSYC\*2310 or PSYC\*2740)

1.00 electives\*

### Semester 3 - Summer

PSYC\*2310 [0.50] Introduction to Social Psychology

PSYC\*2740 [0.50] Personality

1.50 electives\*

### Semester 4 - Fall

PSYC\*2360 [0.50] Introductory Research Methods

PSYC\*3320 [0.50] Statistical Principles in Psychological Research

1.00 Psychology core

0.50 electives\*

### Winter Semester

COOP\*1000 [0.00] Co-op Work Term I

### Summer Semester

COOP\*2000 [0.00] Co-op Work Term II

### Semester 5 - Fall

PSYC\*3370 [0.50] Experimental Design and Analysis

2.00 electives\*

### Semester 6 - Winter

PSYC\*3250 [0.50] Psychological Measurement

PSYC\*3380 [0.50] Non-experimental Research Methods

1.50 electives\*

### Summer Semester

Optional

### Fall Semester\*\*

COOP\*3000 [0.00] Co-op Work Term III

One of:

PSYC\*4910 [0.50] Co-operative Education Project I

0.50 PSYC\*

0.50 electives

### Semester 7 - Winter\*\*

PSYC\*4870 [0.50] Honours Thesis I

2.00 electives\*

### Semester 8 - Summer

PSYC\*4880 [1.00] Honours Thesis II

1.00 electives\*

\*at least 1.00 of the elective credits in semester 5, 6, 7, or 8 must be a 3000 level or above Psychology elective (and include either PSYC\*4370 or PSYC\*4900). The total of electives should include the B.A. program distribution requirements and the completion of the total number of credits required at the 3000 level or above required by the B.A. degree.

\*\*the schedule for COOP\*3000 and semester 7 requirements can be exchanged

## Rural and Development Sociology (RDS)

### Department of Sociology and Anthropology, College of Social and Applied Human Sciences

The program of Rural and Development Sociology focuses on the study of rural institutions and processes in industrialized societies with an emphasis on changes in rural communities, agriculture and natural resources, including historical and comparative analyses of the development of rural life. It provides students with major research and conceptual tools needed for the understanding of rural transformation, their interdependence with the natural environment and with urban society.

### Major (Honours Program)

A minimum of 8.00 credits in Sociology and Anthropology is required, including:

- ANTH\*1150, SOAN\*2111/2, SOAN\*2120, SOAN\*3070, SOAN\*3120, SOAN\*4500, SOC\*1100, SOC\*2080, (ANTH\*3690 or SOC\*3310), SOC\*3380, SOC\*4210,
- 4 of SOAN\*4220, SOAN\*4240, SOC\*2010, SOC\*2090, SOC\*2280, SOC\*2390, SOC\*4880, SOC\*4890, SOC\*4900, SOC\*4910
- at least 1.00 credits at the 4000 level

### Rural Extension Studies (RES)

### School of Environmental Design and Rural Development, Ontario Agricultural College

Rural Extension Studies is offered as a minor in the honours program. It is designed to provide students with an opportunity to pursue studies which focus on the development of non formal educational programs for rural people and rural communities and their organizations. The program comprises 5.00 credits. 3.00 of these are drawn from the area of Rural Extension studies; 2.00 electives must be chosen from 1 or several complementary disciplines in the social sciences. Students seeking counselling should consult with a departmental advisor in the School of Rural Extension Studies.

### Minor (Honours Program)

A minimum of 5.00 credits is required, including:

REXT\*2000 [0.50] Introduction to Rural Extension

REXT\*3000 [0.50] Program Development and Evaluation

Four of the following:

REXT*3040	[0.50]	Communication Process
REXT*3060	[0.50]	International Communication
REXT*3080	[0.50]	Technology in Extension
REXT*3100	[0.50]	Teaching and Learning in Non-Formal Education
REXT*4020	[0.50]	Rural Extension in Change and Development
REXT*4100	[0.50]	Leadership Development in Rural Organization

### Electives

The remaining credits required for the minor must be selected from the following list. However, students are strongly advised to consult with the departmental advisor before choosing electives.

ECON*4830	[0.50]	Economic Development
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*3320	[0.50]	Agriculture and Society
POLS*2080	[0.50]	Development and Underdevelopment
POLS*2200	[0.50]	International Relations
PSYC*2310	[0.50]	Introduction to Social Psychology
PSYC*2450	[0.50]	Introduction to Developmental Psychology
SOAN*3300	[0.50]	Community Development
SOC*2080	[0.50]	Rural Sociology

## Social Psychology (SPSY)

### Department of Psychology, College of Social and Applied Human Sciences

Social Psychology focuses on the ways in which human experience is grounded in social interactions and social relationships. Although this Minor was designed for any student seeking to broaden their knowledge beyond their Major area of study, it may be of particular interest to students who are considering future careers in human service fields such as Social Work, Counselling, Criminology, and Occupational Therapy. The program may also be of special interest to students associated with the Collaborative Diploma Program in Public/Private Sector Administration.

### Minor (Honours Program)

(May not be taken in combination with a Psychology Honours Major)

A minimum of 6.00 credits is required, including:

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
PSYC*3310	[0.50]	Applied Social Psychology

2.50 credits in 5 Psychology Core Courses to include PSYC\*2310, PSYC\*2450

0.50 credits in a Psychology electives (it is recommended that this elective be chosen from the list of seven restricted electives below)

1.50 credits from three of the following seven courses:

PSYC*3070	[0.50]	Psychology in Human Resource Management
PSYC*3080	[0.50]	Organizational Psychology
PSYC*3450	[0.50]	Social and Personality Development
PSYC*3500	[0.50]	Social Interactions
PSYC*3520	[0.50]	Political Psychology
PSYC*3690	[0.50]	Community Mental Health
PSYC*4310	[0.50]	Advanced Topics in Social Psychology

**Note:** Courses designated with (H) in Section XII--Course Descriptions are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology.

## 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 and PHIL\*2180.

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.

Sociology credit may also be given for some Anthropology courses with the exception of ANTH\*3840 through ANTH\*4910 inclusive. See a Sociology/Anthropology Faculty Advisor for approval of substitutions.

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
SOC*1100	[0.50]	Sociology

2.50 additional credits from the Department of Sociology and Anthropology, including at least 1.00 at the 3000 level

Major (Honours Program)

A minimum of 8.00 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
SOAN*3070	[0.50]	Qualitative and Observational Methods
SOAN*3120	[0.50]	Quantitative Methods
SOC*1100	[0.50]	Sociology
SOC*3310	[0.50]	Contemporary Theory

4.00 additional credits from the Department of Sociology and Anthropology, including at least 1.50 at the 4000 level

Minor (Honours 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
SOC*1100	[0.50]	Sociology

2.50 additional credits from the Department of Sociology and Anthropology, including at least 1.00 credits at the 3000 level or above

The following courses may be used toward a sociology specialization: FRHD\*3060 and PHIL\*2180.

Spanish (SPAN)

School of Languages and Literatures, College of Arts

The Spanish 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. Such students should consult the Head of Spanish before beginning their studies, so that pre-requisite waiver forms are completed. 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.

Study Abroad

The Spanish Studies program encourages its students to take advantage of the University of Guelph's exchange programs and the semester abroad opportunities. Exchange programs with the University of Málaga and the University of La Rioja in Spain and with the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) in Mexico are very popular. 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 and SPAN\*2040 and SPAN\*3080. 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 Coordinator of Spanish for more information.

Area of Concentration (General Program)

A minimum of 5.00 credits in Spanish is required, including:

- a. 3.00 credits from SPAN\*1100, SPAN\*1110, SPAN\*2000, SPAN\*2010, SPAN\*3500, SPAN\*3530, SPAN\*4500, SPAN\*4520
- b. SPAN\*2040, SPAN\*2990, SPAN\*3080
- c. 0.50 credits in literature

Major (Honours Program)

A minimum of 8.00 credits in Spanish is required, including:

- a. SPAN\*2000, SPAN\*2010, SPAN\*2040, SPAN\*2990, SPAN\*3080, SPAN\*3500, SPAN\*3530, SPAN\*4500, SPAN\*4520
- b. 3.50 credits in literature courses

**Note:** Students intending to proceed to graduate studies should take SPAN\*3170 and SPAN\*4170

Minor (Honours Program)

A minimum of 5.50 credits in Spanish is required, including:

- a. 3.00 credits from SPAN\*1100, SPAN\*1110, SPAN\*2000, SPAN\*2010, SPAN\*3500, SPAN\*3530, SPAN\*4500, SPAN\*4520
- b. SPAN\*2040, SPAN\*2990, SPAN\*3080
- c. 1.00 credits in literature

**Note:** Students in the Spanish program may include one of the following courses for credit in their program:

ARTH*2050	[0.50]	Modern Latin American Art
ARTH*3050	[0.50]	Pre-Columbian Art
HIST*2110	[0.50]	The Atlantic World 1500-1850
HIST*2920	[0.50]	Republican Latin America
HIST*3150	[0.50]	History and Culture of Mexico
HIST*3420	[0.50]	Colonial Latin America
POLS*3080	[0.50]	Politics of Latin America

Any other substitution for required courses can only be made with the approval of the faculty advisor.

Statistics (STAT)

Department of Mathematics and Statistics, College of Physical and Engineering Science

The discipline of Statistics is essential in the social sciences, biological sciences, physical sciences, and health professions. The specialization in Statistics emphasizes applications of statistical theory and methods to other disciplines and is available in the B.A. Honours Program as a major or minor and as an area of concentration in the General Program.

Students are encouraged to combine the study of statistics with another field.

Statistical computing is a fundamental tool for the application of modern statistical methods. Students in these programs will develop skills in computer applications programming using such high-level languages as SAS and S-PLUS.

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
MATH*2150	[0.50]	Applied Matrix Algebra
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
STAT*3320	[0.50]	Sampling Theory with Applications

Honours Programs

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\*2010, PSYC\*3320, SOAN\*3120.

Major (Honours Program)

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 minimum of 20.00 credits is required to complete the degree, with a minimum of 9.50 credits required as below to complete the major.

1.50 credits as follows:

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
MATH*1210	[0.50]	Calculus II

5.00 credits in Statistics and Mathematics as follows:

MATH*2130	[0.50]	Numerical Methods
MATH*2200	[0.50]	Advanced Calculus 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*3210	[0.50]	Experimental Design
STAT*3240	[0.50]	Applied Regression Analysis
STAT*3320	[0.50]	Sampling Theory with Applications

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

2.50 credits in Statistics at the 3000 or 4000 level, of which at least 2.00 credits must be at the 4000 level.

0.50 credits in Mathematics or Statistics at the 2000-level or above.

Recommended Schedule of Studies for Major (Honours Program)

<b>Semester 1</b>		
MATH*1200	[0.50]	Calculus I
2.00 electives*		
<b>Semester 2</b>		
CIS*1500	[0.50]	Introduction to Programming
MATH*1210	[0.50]	Calculus II
1.50 electives		
<b>Semester 3</b>		
MATH*2200	[0.50]	Advanced Calculus I
STAT*2040	[0.50]	Statistics I
One of:		
MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I
1.00 electives**		
<b>Semester 4</b>		
MATH*2130	[0.50]	Numerical Methods
STAT*2050	[0.50]	Statistics II
1.50 electives**		
<b>Semester 5</b>		
STAT*3100	[0.50]	Introductory Mathematical Statistics I
STAT*3240	[0.50]	Applied Regression Analysis
STAT*3320	[0.50]	Sampling Theory with Applications
1.00 electives**		
<b>Semester 6</b>		
STAT*3110	[0.50]	Introductory Mathematical Statistics II
STAT*3210	[0.50]	Experimental Design
1.50 electives**		
<b>Semester 7</b>		
2.50 electives**		
<b>Semester 8</b>		
2.50 electives**		

\* See "Semester One Requirements" for Bachelor of Arts programs.

\*\*Electives must satisfy the following requirements:

1. Electives must include at least 2.50 credits in Statistics at the 3000 or 4000 level, and an additional 0.50 credits in Statistics or Mathematics at the 2000 level or above.

2. At least 2.00 credits in Statistics must be at the 4000 level.

3. Electives plus core courses must include at least 7.00 credits at the 3000 or 4000 level.

Minor (Honours Program)

At least 5.00 credits in Statistics or Mathematics is required, including:

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

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

0.50 additional credits in Statistics

0.50 additional credits in Statistics or Mathematics

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 for a more balanced study in the two disciplines. Both programs, however, require work in both Studio Art and 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

The students who elect to take a substantial number of credits in either Art History or Studio Art with the objective of graduate work are advised to obtain counselling from faculty regarding their choices. However, in general, 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. A Studio career to the graduate level will normally require some education in all the traditional and contemporary media as well as an awareness of art theory.

Core Requirements

ARTH*1220	[0.50]	The Visual Arts Today
ARTH*1520	[0.50]	Art Historical Studies II
SART*1050	[0.50]	Integrated 2-D Media
SART*1060	[0.50]	Media Convergence

Major (Honours Program)

A minimum of 9.00 credits is required, including:

- a. the Studio Art core

b. 2.00 additional credits in Studio Art, including at least 0.50 credits from List A and 0.50 from List B

c. 2.00 additional credits in Art History including:

i. 0.50 credits in Canadian Art (ARTH\*2060, ARTH\*2490, ARTH\*3010)

ii. 0.50 credits in Western Art (ARTH\*2150, ARTH\*2280, ARTH\*2540, ARTH\*2550, ARTH\*2950, ARTH\*3100, ARTH\*3150, ARTH\*3200, ARTH\*3540, ARTH\*3550, ARTH\*3640)

iii. 0.50 credits in Modern and Contemporary Art (ARTH\*2070, ARTH\*2290, ARTH\*2580, ARTH\*2600, ARTH\*3520, ARTH\*3570)

iv. 0.50 credits in Art Theory, Critical Methodology and Museology (ARTH\*2120, ARTH\*2480, ARTH\*3780)

d. 3.00 additional credits in Studio Art or Art History

**Note:** at least 1.50 credits from the total of 9.00 credits must be taken in Studio Art or Art History at the 4000 level.

Minor (Honours Program)

A minimum of 6.00 credits is required, including:

- a. the Studio Art core

b. 0.50 credits in Studio Art or Art History at the 4000 level

c. 1.50 additional credits in Art History, including:

i. 0.50 credits in Canadian Art (ARTH\*2060, ARTH\*2490, ARTH\*3010)

ii. 0.50 credits in Modern and Contemporary Art (ARTH\*2070, ARTH\*2290, ARTH\*2580, ARTH\*2600, ARTH\*3520, ARTH\*3570)

d. 2.00 additional credits in Studio Art, including 0.50 credits from List A and 0.50 from List B

List A

SART*2090	[0.50]	Drawing I
SART*2200	[0.50]	Painting I
SART*2460	[0.50]	Introductory Printmaking I
SART*2470	[0.50]	Introductory Printmaking II
SART*2610	[0.50]	Photography I
SART*2700	[0.50]	Introduction to Computer Graphics
SART*2710	[0.50]	Drawing Graphics on the Computer
SART*3090	[0.50]	Drawing II
SART*3200	[0.50]	Painting II
SART*3410	[0.50]	Intaglio
SART*3450	[0.50]	Lithography
SART*3470	[0.50]	Photo-Printmaking
SART*3480	[0.50]	Web Development and Design
SART*3750	[0.50]	Photography II
SART*4090	[0.50]	Drawing III
SART*4100	[0.50]	Drawing IV
SART*4200	[0.50]	Painting III
SART*4210	[0.50]	Painting IV
SART*4230	[0.50]	Special Topics in Painting
SART*4410	[0.50]	Experimental Printmaking
SART*4450	[0.50]	Advanced Printmaking
SART*4700	[0.50]	Photography III
SART*4710	[0.50]	Photography IV
SART*4830	[0.50]	Interactive Multimedia

List B

SART*2300	[0.50]	Sculpture I
SART*2800	[0.50]	Extended Media I
SART*3300	[0.50]	Sculpture II
SART*3770	[0.50]	Extended Media II
SART*4300	[0.50]	Sculpture III
SART*4310	[0.50]	Sculpture IV
SART*4800	[0.50]	Special Topics in Sculpture
SART*4810	[0.50]	Extended Media III
SART*4820	[0.50]	Extended Media IV
SART*4870	[0.50]	Special Topics in Sculpture

**Notes:**

1. Students in the Art History Major or Minor cannot count more than 11.00 credits in Art History or 11.00 credits in Studio Arts towards their honours degree.
2. Details of advanced standing for transfer students from the Ontario College of Art and Design (OCAD) can be found in the section on Admission Information.
3. In accordance with the B.A. program regulation limiting the number of credits to be taken in any subject area, OCAD graduates granted the maximum advanced standing of credits in Studio Arts will be limited to 2.00 additional credits in Studio Arts at the University of Guelph.
4. 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 in dramatic literature, theatre history, criticism and theory, together with directing, acting, design, technical theatre, playwriting, and media studies.

The program has a special interest in the drama and theatre of Canada. Course offerings reflect this interest where appropriate.

#### Notes:

1. A maximum of 2.00 credits in Directed Readings or Special Studies Courses (THST\*3410, THST\*3420, THST\*3600, DRMA\*3610 ) 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 of English and Theatre Studies' website: <http://www.arts.uoguelph.ca/sets/>.
2. In connection with THST\*1040 and some seminar 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 are THST\*2230, THST\*3110, THST\*3120, THST\*3220, THST\*3230, THST\*3410, THST\*3420, THST\*4090, THST\*4250, THST\*4280.

## Area of Concentration (General Program)

A minimum of 5.00 credits in Theatre Studies is required, including:

- a. THST\*1040, THST\*2010, THST\*2080, THST\*2120, THST\*2230, THST\*2240, THST\*3550, THST\*3850
- b. at least one of THST\*3650, THST\*3660
- c. 0.50 other credits in Theatre Studies

## Major (Honours Program)

A minimum of 9.00 credits in Theatre Studies is required, including:

- a. THST\*1040, THST\*1150, THST\*2010, THST\*2080, THST\*2120, THST\*2230, THST\*2240, THST\*3550, THST\*3850, THST\*4280
- b. one of THST\*3650 or THST\*3660
- c. at least one of THST\*4320 or THST\*4330
- d. 2.00 other credits in Theatre Studies

## Minor (Honours Program)

A minimum of 5.00 credits in Theatre Studies is required, including :

- a. THST\*1040, THST\*2010, THST\*2080, THST\*2120, THST\*2230, THST\*2240, THST\*3550, THST\*3850
- b. one of THST\*3650 or THST\*3660
- c. 0.50 other credits in Theatre Studies

## Visual Arts of the Americas (VAA) (Minor)

### School of Fine Art and Music

The Minor program in Visual Arts of the Americas enables students to study the art history of Canada, the United States, and Central and South America as an integrated field where certain basic conditions are shared: the existence of aboriginal traditions persisting from the pre-conquest period, the confrontation of a variety of European, African and Asian cultural heritages, and a continuing post-colonial evolution producing hybrid cultural identities.

This program of study is designed as a complement to a significant number of Major specialization, suitable for any student wishing to broaden their knowledge beyond their Major area of study.

## Minor (Honours Program)

(May not be taken in combination with Art History Honours Major).

A minimum of 5.00 credits is required, including:

- a. ARTH\*1220 [0.50] The Visual Arts Today  
ARTH\*1510 [0.50] Art Historical Studies I  
ARTH\*1520 [0.50] Art Historical Studies II
- b. 3.50 additional credits in Art History as follows:  
ARTH\*2480 [0.50] Introduction to Art Theory and Criticism  
ARTH\*3220 [0.50] Nationalism and Identity in Art  
Two of:  
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\*2490 [0.50] History of Canadian Art  
Two of:  
ARTH\*3010 [0.50] Contemporary Canadian Art  
ARTH\*3050 [0.50] Pre-Columbian Art  
ARTH\*3060 [0.50] Public Art  
One of:  
ARTH\*4050 [0.50] Seminar in the Americas I  
ARTH\*4060 [0.50] Seminar in the Americas II

## Women's Studies (WMST)

### Interdisciplinary Program

**Women's Studies Office, College of Arts, Ext. 54344.**

The Women's Studies program offers an interdisciplinary program that uses gender as its focus of analysis.

## Area of Concentration (General Program)

A minimum of 5.00 credits is required, including:

- a. 4.50 credits from List A
- b. 0.50 additional credits from Lists A or B

## Major (Honours Program)

A minimum of 8.00 credits is required, including:

- a. 4.50 credits from List A
- b. 3.50 additional credits from Lists A or B

At least 4.00 of these credits must be at the 3000 level or above.

## Minor (Honours Program)

A minimum of 5.00 credits is required, including:

- a. 4.50 credits from List A
- b. 0.50 additional credits from Lists A or B

## List A

WMST*1000	[0.50]	Introduction to Women's Studies
WMST*2000	[0.50]	Women and Representation
WMST*3000	[0.50]	Feminist Theory and Methods
WMST*3010	[0.50]	Gender and Diversity
WMST*4010	[0.50]	Seminar in Women's Studies
Two of:		
ARTH*3780	[0.50]	Gender and Art
ENGL*2880	[0.50]	Women in Literature
HIST*2930	[0.50]	Women and Cultural Change
PHIL*2060	[0.50]	Philosophy of Feminism I
PHIL*3210	[0.50]	Women in the History of Philosophy

Two of:

ANTH*3400	[0.50]	The Anthropology of Gender
GEOG*3090	[0.50]	Gender and Environment
ISS*3420	[0.50]	Women Social and Political Theorists
POLS*2150	[0.50]	Gender and Politics
POLS*3710	[0.50]	Politics and Sexuality
PSYC*3300	[0.50]	The Psychology of Gender
SOAN*2400	[0.50]	Introduction to Gender Systems

## List B

ENGL*2190	[0.50]	Representation and Sexuality
ENGL*4220	[0.50]	Special Topics in Women's Writings
FREN*3560	[0.50]	Contemporary French Women's Writings
HIST*2800	[0.50]	The History of the Modern Family
HIST*3020	[0.50]	Sexuality and Gender in History
HIST*3570	[0.50]	Women in Modern Europe
HUMN*3170	[0.50]	Women, Virtue and Honour in Spanish Drama (In English)
PHIL*4060	[0.50]	Philosophy of Feminism II
SOAN*3100	[0.50]	Comparative Perspectives on Families and Households
SOAN*4220	[0.50]	Canadian Rural Women
SOAN*4240	[0.50]	Women and the Development Process
THST*3300	[0.50]	Sexuality and The Stage
WMST*3510	[0.50]	Directed Readings in Women's Studies
WMST*3520	[0.50]	Independent Workplace Learning in Women's Studies

WMST\*4510 [0.50] Advanced Topics in Women's Studies

WMST\*4520 [0.50] Advanced Topics in Women's Studies

An independent study or reading course on an appropriate topic from any subject area of the College of Arts or the College of Social and Applied Human Science may also be included in the program.

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

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

### 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 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: [http://www.uoguelph.ca/uai/c/students\\_faculty.shtml](http://www.uoguelph.ca/uai/c/students_faculty.shtml) 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.

1. First Year Core - 4.00 credits (2.00 Science and 2.00 Arts/Social Sciences).
2. Subject Area Core - (ASCI) - 3.00 credits.
3. Arts/Social Science Minor - 5.00 credits.
4. Science Minor - 5.00 credits
5. Free Electives - 3.00 credits.

#### 1. First-year Core - 4.00 credits

Science Core - 2.00 credits including:

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I

One of:

MATH*1080	[0.50]	Elements of Calculus I
MATH*1200	[0.50]	Calculus I

One of:

PHYS*1000	[0.50]	An Introduction to Mechanics
PHYS*1070	[0.50]	Introductory Physics for Life Sciences
PHYS*1110	[0.50]	Introductory Physics with Applications I

Arts and Social Science Core - 2.00 credits including:

- 1.00 credits over at least 2 different subject areas in the College of Arts: ARTH - Art History; CLAS - Classical Studies; DRMA - Drama; ENGL - English; EURO - European Studies; FREN - French Studies; GERM - German Studies; GREK - Greek; HIST - History; HUMN - Humanities; ITAL - Italian Studies; LAT - Latin Studies; LING - Linguistics; MUSC - Music; PHIL - Philosophy; SART - Studio Art; SPAN - Spanish Studies; WMST - Women's Studies
- 1.00 credits over at least 2 different subject areas in the College of Social and Applied Human Sciences: ANTH - Anthropology; ECON - Economics; GEOG - Geography; IDEV - International Development Studies; ISS - Interdisciplinary Social Science;

POLS - Political Science; PSYC - Psychology; SOAN - Sociology and Anthropology; SOC - Sociology;

#### 2. Subject Area Core - 3.00 credits

- 1.50 credits from:

ASCI*1000	[0.50]	Society and Science I: Historical Perspectives
ASCI*1010	[0.50]	Society and Science II: Current Issues
ASCI*2000	[0.50]	Modes of Inquiry and Communication Across Disciplines

- 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*4000	[0.50]	Arts and Sciences Honours Seminar
ASCI*4010	[0.50]	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

**Note:** 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.

#### 3. Arts/Social Sciences Minors - 5.00 credits

Minors available in the Arts/ Social Sciences core (see B.A. program descriptions):

Anthropology  
 Art History  
 Art Theory and Criticism  
 Business Administration  
 Classical Languages  
 Classical Studies  
 Cognitive Neuropsychology  
 Criminal Justice & Public Policy  
 Developmental Psychology  
 Economics  
 Educational Psychology  
 English  
 Environmental Studies  
 European Culture and Civilization  
 Family & Child Studies  
 French Studies  
 Geography  
 German  
 History  
 International Development  
 Italian  
 Marketing Management  
 Museum Studies  
 Music  
 Organizational Behaviour  
 Philosophy  
 Political Science  
 Rural Extension Studies  
 Social Psychology  
 Sociology  
 Spanish  
 Studio Art  
 Theater Studies  
 Visual Art of the Americas  
 Women's Studies

#### 4. Science Minor - 5.00 credits

Minors available in the Science core (see B.Sc. program descriptions):

Biochemistry  
 Biology  
 Biotechnology  
 Chemistry  
 Computing & Information Science  
 Ecology

Food Science  
Forest Science  
Functional Foods & Nutraceuticals  
Geology  
GIS\* & Environmental Analysis  
Mathematics  
Microbiology  
Molecular Biology and Genetics  
Neuroscience  
Nutritional Sciences  
Plant Biology  
Physics  
Psychology  
Statistics  
Zoology  
\* Geographic Information Systems

**5. Free Electives - 3.00 credits (maximum)**

The program includes 3.00 free electives. Electives may be completed in any subject area. The number of free electives is reduced if a minor requires more than 5.00 credits.

This program includes 3.00 credits at the 3000 or 4000 level, including 2.00 credits at the 4000 level. This requirement is partially fulfilled by senior level courses in the Subject Area Core (ASCI) requirements.

A maximum of 7.00 credits at the 1000 level may be counted toward the 20.00 credits requirement.

Students cannot, of course, select Psychology for both their B.Sc. and B.A. minors.

**Double Counting Rule**

A maximum of 1.00 credits may be double-counted.

If a credit is double-counted towards both the first year core and one minor, it cannot be counted towards the second minor.

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

The University of Guelph, in collaboration with the regional campus at Ridgetown, 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 was designed for students who do not intend to pursue post-graduate studies and are strongly focused on securing employment that makes use of the knowledge acquired in their bachelor's degree.

This degree is a unique blend of applied and theoretical learning, with an emphasis on experiential learning opportunities. It is designed for those with a commitment to urban, regional, and/or rural stewardship and service of our living resources.

At the present time, two majors, Horticulture Management and Environmental Management, are available in the program through University of Guelph's Ridgetown campus (with Semester 5 to 8 credits available at the Guelph campus).

### Program Information

Students are required to follow the Schedule of Studies for the major in Horticulture Management. A solid grounding in applied aspects of science, technology and business provides graduates with sufficient breadth or expertise to become knowledgeable managers in all aspects of the horticultural business. The first 10.00 credits are available through the Ridgetown campus, and the additional 10.00 credits are available through the Guelph campus.

### Academic Advising and Counselling

#### Program Counselling

Program Counsellors are available at both the Ridgetown and Guelph campuses to assist students with course selection and other questions pertaining to the degree program. For information about how to contact a program counsellor, and for more information about academic advising and program counselling, see Section VII -- Academic Counselling of the current Undergraduate Calendar

#### Academic Advising

On entering the program all students are assigned to a faculty advisor who will mentor them throughout their first two years. 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 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.

### 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 (normally 5 courses). Students must successfully complete a minimum of 4.00 university credits and/or course equivalents at the 3000 level or higher, of which at least 1.00 credits must be at the 4000 level. In addition to core requirements, students must successfully complete at least 4.00 credits from the list of Restricted Electives available in Semesters 5-8.

### B.B.R.M. Program Regulations

#### Entry Credits

OSS Curriculum: Grade 12 U English; Grade 12 U Biology; 4 additional U or U/C credits.

#### Recommendations and Notes:

It is recommended that applicants include Grade 12U level science or math in their course of study. Students entering the degree program who are deficient in U level Mathematics or Chemistry should consult with the program counsellor. Summer semester courses will be available through a Ridgetown campus Summer Institute, Distance Education or other means. It is recommended that prior to enrolment in the degree program, students lacking Grade 12U Advanced Functions and Introductory Calculus enrol in the non-credit course "Getting Ready for Calculus" offered through the Office of Open Learning.

#### Special Expenses

Expenses for field trips can range from \$20 to \$50 per semester in the first 4 semesters and from \$25 to \$50 in each of the last 4 semesters. In certain courses modest expenses will be incurred for supplies.

### Horticulture Management Major

This major will require the completion of 20.00 credits.

*Students deficient in U level Mathematics or Chemistry are required to enrol in the appropriate upgrading course(s), MATH\*1000 or CHEM\*1060 (available in a distance format) during their first year. MATH\*1000 is to be completed before Semester 2 (may substitute for SOIL\*2010 in Semester 1 and take SOIL\*2010 as the restricted elective in Semester 2). CHEM\*1060 must be completed before Semester 3. Students also may access summer distance education courses such as SOIL\*2010 or ECON\*1050, to maintain their progress.*

#### Semesters 1 to 4 offered at the Ridgetown campus

##### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CIS*1000	[0.50]	Introduction to Computer Applications
HORT*1050	[0.50]	Introduction to Horticultural Management
SOIL*2010	[0.50]	Soil Science

One of:

HORT*1060	[0.50]	Plant Identification: Woody Plants
HORT*1070	[0.50]	Fruit Production
HORT*1080	[0.50]	Vegetable Production I

##### Semester 2 - Winter

AGEC*1100	[0.50]	Introduction to Business
AGR*1050	[0.50]	Communication Skills
ECON*1050	[0.50]	Introductory Microeconomics

One of:

EDRD*1150	[0.50]	Landscape Design
ENVB*1010	[0.50]	Food Crop Pest Management
SOIL*1100	[0.50]	Plant Propagation Techniques

0.50 restricted electives

##### Semester 3 - Fall

AGEC*2110	[0.50]	Sales and Society
AGEC*2220	[0.50]	Financial Accounting
BIOL*1040	[0.50]	Biology II

One of:

HORT*1200	[0.50]	Vegetable Production II
HORT*2010	[0.50]	Greenhouse Management
HORT*2060	[0.50]	Plant Identification: Herbaceous Plants

0.50 restricted electives

##### Semester 4 - Winter

AGEC*2230	[0.50]	Management Accounting
AGR*2100	[0.50]	Human Resource Management
CHEM*1040	[0.50]	General Chemistry I
HORT*2200	[0.50]	Integrated Project

0.50 restricted electives

#### Semesters 5 to 8 offered on Guelph campus

##### Semester 5 - Fall

AGEC*3310	[0.50]	Operations Management
AGR*3500	[0.50]	Experiential Education

One of:

BOT*2100	[0.50]	Life Strategies of Plants
ENVB*2040	[0.50]	Plant Health and the Environment

1.00 restricted electives

##### Semester 6 - Winter

SOIL*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management
STAT*2060	[0.50]	Statistics for Business Decisions

One of:

BOT*3310	[0.50]	Plant Growth and Development
PBIO*3110	[0.50]	Crop Physiology

0.50 restricted electives

0.50 electives

##### Semester 7 - Fall

AGR*4150	[0.50]	Experiential Education II
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One of:

MET*2020	[0.50]	Agrometeorology
SOIL*3080	[0.50]	Soil and Water Conservation

0.50 restricted electives

1.00 electives

##### Semester 8 - Winter

AGR*4050	[0.50]	Professionalism and Agrology
AGR*4500	[0.50]	Agrifood Industry Problem-Solving

0.50 restricted electives

1.00 electives

## Horticulture Management Major Restricted Electives

In addition to the 13.50 required credits listed above, students must take a minimum of 4.00 restricted electives throughout the program. Students must select at least 2.50 credits from List A (Science and Discipline) and at least 1.50 credits from List B (Business).

### List A: Science and Discipline

#### Available at Regional Campus

EDRD*1150	[0.50]	Landscape Design
EDRD*2050	[0.50]	Landscape Construction and Planning
ENVB*1010	[0.50]	Food Crop Pest Management
HORT*1060	[0.50]	Plant Identification: Woody Plants
HORT*1070	[0.50]	Fruit Production
HORT*1080	[0.50]	Vegetable Production I
HORT*1100	[0.50]	Plant Propagation Techniques
HORT*1200	[0.50]	Vegetable Production II
HORT*2010	[0.50]	Greenhouse Management
HORT*2060	[0.50]	Plant Identification: Herbaceous Plants
HORT*2080	[0.50]	Horticultural Weed Science
MCS*1000	[0.50]	Introductory Marketing

#### Available by Distance Education

LARC*1950	[0.50]	History of Cultural Form I
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#### Available at Guelph Campus

BOT*2100	[0.50]	Life Strategies of Plants
ENVB*3030	[0.50]	Pesticides and the Environment
ENVB*3040	[0.50]	Natural Chemicals in the Environment
ENVB*3110	[0.50]	Natural History of Insects
ENVB*3210	[0.50]	Plant Pathology
GEOG*3320	[0.50]	Agriculture and Society
HORT*2450	[0.50]	Turf Management I
HORT*3010	[0.50]	Annual, Perennial and Indoor Plants - Identification and Use
HORT*3260	[0.50]	Woody Plants
HORT*3280	[0.50]	Greenhouse Production
HORT*3340	[0.50]	Culture of Plants
HORT*3510	[0.50]	Vegetable Production
HORT*4250	[0.50]	Nursery Production
HORT*4300	[0.50]	Postharvest Physiology
HORT*4420	[0.50]	Fruit Crops
HORT*4450	[0.50]	Turf Management I
LARC*2820	[0.50]	Urban and Regional Planning
MET*2020	[0.50]	Agrometeorology
REXT*2000	[0.50]	Introduction to Rural Extension
REXT*3000	[0.50]	Program Development and Evaluation
REXT*3100	[0.50]	Teaching and Learning in Non-Formal Education
REXT*4100	[0.50]	Leadership Development in Rural Organization
SOIL*2120	[0.50]	Introduction to Environmental Stewardship
SOIL*3050	[0.50]	Land Utilization
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management

### List B: Business

#### Available at Regional Campus

AGEC*2120	[0.50]	Business Marketing
ENVM*1090	[0.50]	Occupational Health and Safety
ENVM*2020	[0.50]	Environmental Law

#### Available by Distance Education

GEOG*3320	[0.50]	Agriculture and Society
MCS*1000	[0.50]	Introductory Marketing
PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
SOC*1100	[0.50]	Sociology

#### Available at Guelph Campus

AGEC*4210	[0.50]	World Agriculture and Economic Development
AGEC*4250	[0.50]	Business Policy
AGEC*4370	[0.50]	Marketing Management
AGR*2400	[0.50]	Economics of the Canadian Food System
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2740	[0.50]	Economic Statistics
ECON*3560	[0.50]	Theory of Finance
MATH*1080	[0.50]	Elements of Calculus I
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
REXT*3080	[0.50]	Technology in Extension

## Environmental Management Major

This major will require the completion of 20.00 credits.

*Students deficient in U level Mathematics or Chemistry are required to enrol in the appropriate upgrading course(s), MATH\*1000 or CHEM\*1060 (available in a distance*

*format) during their first year. MATH\*1000 is to be completed before Semester 2 (may substitute for SOIL\*2010 in Semester 1 and take SOIL\*2010 as the restricted elective in Semester 2). CHEM\*1060 must be completed before Semester 3. Students also may access summer distance education courses such as SOIL\*2010 or ECON\*1050, to maintain their progress.*

### Semesters 1 to 4 offered at the Ridgetown campus

#### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CIS*1000	[0.50]	Introduction to Computer Applications
ENVM*1000	[0.50]	Introductory Environmental Issues
ENVM*1050	[0.50]	Surveying and GIS
SOIL*2010	[0.50]	Soil Science

#### Semester 2 - Winter

AGEC*1100	[0.50]	Introduction to Business
AGR*1050	[0.50]	Communication Skills
ECON*1050	[0.50]	Introductory Microeconomics
ENVM*1020	[0.50]	Introduction to Environmental Microbiology

0.50 restricted electives

#### Semester 3 - Fall

BIOL*1040	[0.50]	Biology II
ENVM*1090	[0.50]	Occupational Health and Safety
ENVM*1100	[0.50]	Ecology
ENVM*2020	[0.50]	Environmental Law

0.50 restricted electives

#### Semester 4 - Winter

AGR*2100	[0.50]	Human Resource Management
CHEM*1040	[0.50]	General Chemistry I
ENVM*1150	[0.50]	Water Resource Management
ENVM*2500	[0.50]	Integrated Project (Environmental)

0.50 restricted electives

### Restricted Electives Available at Ridgetown:

ENVM*1070	[0.50]	Nutrient Management
ENVM*1120	[0.50]	Environmental Monitoring
ENVM*2050	[0.50]	Agriculture and Environmental Stewardship
ENVM*2060	[0.50]	Sewage and Wastewater Treatment
ENVM*2070	[0.50]	Water Treatment
ENVM*2080	[0.50]	Industrial Waste Management
ENVM*2090	[0.50]	Spills Response Planning

### Semesters 5 to 8 offered on Guelph campus

#### Semester 5 - Fall

AGR*3500	[0.50]	Experiential Education
AGEC*2700	[0.50]	Survey of Natural Resource Economics
AGEC*4290	[0.50]	Land Economics
SOIL*3080	[0.50]	Soil and Water Conservation

0.50 selected course group or elective

#### Semester 6 - Winter

GEOG*3130	[0.50]	Agrogeology
MET*2020	[0.50]	Agrometeorology
SOIL*3300	[0.50]	Land Resource Stewardship
STAT*2060	[0.50]	Statistics for Business Decisions

0.50 elective

#### Semester 7 - Fall

One of:

ENVB*4420	[0.50]	Problems in Environmental Biology
SOIL*4110	[0.50]	Natural Resources Management Field Camp
SOIL*4250	[0.50]	Soils in the Landscape

One of:

GEOG*2480	[0.50]	Mapping and GIS
SOIL*3600	[0.50]	Remote Sensing

0.50 electives

1.00 credits from selected course group

#### Semester 8 - Winter

AGR*4050	[0.50]	Professionalism and Agrology
AGEC*4310	[0.50]	Resource Economics
GEOG*3060	[0.50]	Groundwater

0.50 selected course group

0.50 electives

### Course Groups

Students would be required to take a minimum of four courses in one selected group, and would be required to consult with a faculty advisor in planning their choice. Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed.

**Nutrient Management**

ENVB*4020	[0.50]	Water Quality and Environmental Management
PBIO*4100	[0.50]	Soil Plant Relationships
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3170	[0.50]	Soil Processes in Landscape
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management

**Natural Resource Management**

ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*3300	[0.50]	Applied Ecology and Environment
ENVB*4020	[0.50]	Water Quality and Environmental Management
ENVB*4780	[0.50]	Forest Ecology
GEOG*3610	[0.50]	Environmental Hydrology
SOIL*2120	[0.50]	Introduction to Environmental Stewardship
SOIL*3050	[0.50]	Land Utilization
SOIL*3100	[0.50]	Resource Planning Techniques

**Environmental Protection**

BIOC*2580	[0.50]	Introductory Biochemistry
ENVB*2010	[0.50]	Food Production and the Environment
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3030	[0.50]	Pesticides and the Environment
ENVB*3300	[0.50]	Applied Ecology and Environment
ENVB*4240	[0.50]	Biological Activity of Pesticides
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4180	[0.50]	Microbial Processes in Environmental Management
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants

Note: Students have three fall and one winter time slots available to take the courses above, and two fall and one winter spaces for free electives, during semesters 5-8. This meshes well with the course offerings except for the final group, where students may have to plan to use their winter free elective space for one of the courses.

## 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.

Given the professional and applied nature of the program, there are no double majors or minors associated with the degree. Elective options enable students to select courses which support or complement their primary field of study.

Students begin studying in one of the following eight specialized management majors during the first semester:

Agricultural Business\*

Hotel and Food Administration\*

Human Resources Management

Management Economics in Industry and Finance\*

Marketing Management\*

Public Management\*

Real Estate and Housing\*

Tourism Management

Co-operative Education is available in the majors denoted by an asterisk (\*).

In addition to specializing in a major area of study, a B.Comm. core ensures that each major also provides a comprehensive commerce education to all students in the program. Common core elements spanning each of the majors includes:

Accounting (1.00 credits)

Economics (1.00 credits)

Finance (1.00 credits)

Information Management (0.50 credits)

Marketing (0.50 credits)

Statistics (0.50 credits)

Operations Management (0.50 credits)

Strategy/Business Policy (0.50 credits)

Organizational Behaviour (0.50 credits)

Law (0.50 credits)

Liberal Education Requirement (1.50 credits)\*

\* (see advisory note)

## 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 VIII - Degree 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.
- Students will not be eligible to graduate while on probationary or required-to-withdraw status.

### 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, Social Sciences and Mathematical and Natural Sciences.

The Liberal Education Requirement of 3 courses (1.50 credits) must be from at least two of the following prefixes:

ANSC Animal Science

ANTH Anthropology

ARTH Art History

BIOL Biology

BIOM Biomedical Sciences

BOT Botany

CHEM Chemistry

CIS Computing and Information Science

CLAS Classical Studies

CROP Crop Science

ENGL English

ENVB Environmental Biology

EURO European Studies

FOOD Food Science

FREN French Studies

FRHD Family Relations and Human Development

GEOG Geography

GEOL Geology

GERM German Studies

GREK Greek

HIST History

HUMN Humanities

IDEV International Development

ISS Interdisciplinary Social Science

ITAL Italian Studies

LAT Latin

LING Linguistics

MATH Mathematics

MBG Molecular Biology and Genetics

MUSC Music

NUTR Nutrition

PHIL Philosophy

PHYS Physics

POLS Political Science

PSYC Psychology

REXT Rural Extension

SART Studio Art

SOAN Sociology and Anthropology

SOIL Soil Science

SOC Sociology

SPAN Spanish Studies

THST Theatre Studies

UNIV Interdisciplinary University  
WMST Women's Studies  
ZOO Zoology

## Double Counting of Courses

Double counting is not permitted within the B.Comm. Program. For example, students can not use courses required in their schedule of studies to meet the Liberal Education Requirement.

## 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 Counsellor or Faculty Advisor.

## Agricultural Business (AGBU)

### Department of Agricultural Economics and Business, Ontario Agricultural College

The Agricultural Business major is concerned with the management problems of business firms and prepares students for a range of management careers in agribusiness.

Graduates of the Agricultural Business program 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 has been fully accredited by the Agricultural Institute of Canada.

Included in the core requirements, the Agricultural Business program provides students with the option of selecting from the Restricted Electives list courses that will compliment their studies. The first option (List A) is designed for students more interested in the business relationships of farming and involves marketing and advanced farm management. The second option (List B) emphasizes the production aspects of farming and involves biology and either animal or plant systems.

The major is administered by the Department of Agricultural Economics and Business in the Ontario Agricultural College and students are urged to consult the departmental advisor. For this major, 15.00 of the 20.00 credits (including 1.50 credits from List A or List B) are specified as core requirements and the remaining 5.00 credits are specified as electives.

## 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

AGR*1100	[0.50]	Introduction to the Agrifood Systems
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1000	[0.50]	Introductory Calculus

1.00 electives

Note: Students who are exceptionally strong in mathematics may substitute either MATH\*1080 or MATH\*1200 for MATH\*1000.

### Semester 2

AGR*1250	[0.50]	Agrifood System Trends & Issues
CIS*1200	[0.50]	Introduction to Computing
ECON*1100	[0.50]	Introductory Macroeconomics
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 electives

### Semester 3

AGEC*2220	[0.50]	Financial Accounting
AGR*2400	[0.50]	Economics of the Canadian Food System
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2740	[0.50]	Economic Statistics

0.50 from List A or List B

### Semester 4

AGEC*2230	[0.50]	Management Accounting
AGEC*2410	[0.50]	Agrifood Markets and Policy
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2770	[0.50]	Introductory Mathematical Economics

One of:

0.50 from List A and 0.50 electives for students selecting List A

1.00 electives for students selecting List B

### Semester 5

AGEC*3320	[0.50]	Financial Management
MCS*3040	[0.50]	Business and Consumer Law
ECON*3740	[0.50]	Introduction to Econometrics

0.50 from List A or List B

0.50 electives

### Semester 6

AGEC*3310	[0.50]	Operations Management
ECON*3560	[0.50]	Theory of Finance
HTM*4390	[0.50]	Individuals and Groups in Organizations

Students choosing List A take 1.00 electives

Students choosing List B take 0.50 from List B and 0.50 electives

### Semester 7

AGEC*3030	[0.50]	The Firm and Markets
AGEC*4250	[0.50]	Business Policy
AGEC*4370	[0.50]	Marketing Management

1.00 electives

### Semester 8

AGEC*4000	[0.50]	Agricultural and Food Policy
AGEC*4240	[0.50]	Futures and Options Markets
AGR*4500	[0.50]	Agrifood Industry Problem-Solving

One of:

0.50 from List A and 0.50 electives for students selecting List A

1.00 electives for students selecting List B

## Restricted Electives

After completion of the first year of the Agricultural Business program, students have the option of selecting three courses from List A or three courses from List B. In order to satisfy the core requirements, students must complete three courses from one of the lists. Students are encouraged to take these courses in the semester indicated in the schedule of studies.

### List A

Semester 3

MCS*1000	[0.50]	Introductory Marketing
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Semester 4

MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
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Semester 8

AGEC*4220	[0.50]	Advanced Farm Management
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### List B\*

BIOL\*1020 in Semester 3

(2 of ANSC\*2340, ANSC\*2350, ANSC\*2360, ANSC\*3150, AGR\*2470, and CROP\*2110)

\* students with OAC Biology may elect to take BIOL\*1030 in Semester 3

## Agricultural Business (Co-op) (AGBU:C)

### Department of Agricultural Economics and Business, Ontario Agricultural College

## 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 - Fall

AGR*1100	[0.50]	Introduction to the Agrifood Systems
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1000	[0.50]	Introductory Calculus

1.00 electives

Note: Students who are exceptionally strong in mathematics may substitute either MATH\*1080 or MATH\*1200 for MATH\*1000.

### Semester 2 - Winter

AGR*1250	[0.50]	Agrifood System Trends & Issues
CIS*1200	[0.50]	Introduction to Computing
ECON*1100	[0.50]	Introductory Macroeconomics
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 electives

### Semester 3 - Fall

AGEC*2220	[0.50]	Financial Accounting
AGR*2400	[0.50]	Economics of the Canadian Food System
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2740	[0.50]	Economic Statistics

0.50 electives from List A or List B

### Semester 4 - Winter

AGEC*2230	[0.50]	Management Accounting
AGEC*2410	[0.50]	Agrifood Markets and Policy
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2770	[0.50]	Introductory Mathematical Economics

0.50 from List A or List B

### Summer Semester

COOP*1000	[0.00]	Co-op Work Term I
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**Fall Semester**

COOP\*2000 [0.00] Co-op Work Term II

**Semester 5 - Winter**

AGEC\*3310 [0.50] Operations Management  
 MCS\*3040 [0.50] Business and Consumer Law  
 ECON\*3740 [0.50] Introduction to Econometrics  
 1.00 electives

**Summer Semester**

Optional academic term.

**Semester 6 - Fall**

AGEC\*3320 [0.50] Financial Management  
 ECON\*3560 [0.50] Theory of Finance  
 HTM\*4390 [0.50] Individuals and Groups in Organizations  
 1.00 electives

**Winter Semester**

COOP\*3000 [0.00] Co-op Work Term III

**Summer Semester**

COOP\*4000 [0.00] Co-op Work Term IV

**Semester 7 - Fall**

AGEC\*3030 [0.50] The Firm and Markets  
 AGECE\*4250 [0.50] Business Policy  
 AGECE\*4370 [0.50] Marketing Management  
 Students choosing List A take 1.00 electives  
 Students choosing List B take 0.50 from List B and 0.50 electives

**Semester 8 - Winter**

AGEC\*4000 [0.50] Agricultural and Food Policy  
 AGECE\*4240 [0.50] Futures and Options Markets  
 AGR\*4500 [0.50] Agrifood Industry Problem-Solving  
 Students choosing List A take 0.50 from List A and 0.50 electives  
 Students choosing List B take 1.00 electives

**Restricted Electives**

As for the regular program.

**Hotel and Food Administration (HAFA)****School of Hospitality and Tourism Management, College of Social and Applied Human Sciences**

The Hotel and Food Administration major prepares graduates to assume positions of responsibility in any aspect of the hospitality field. It includes principles of administration, theories of interpersonal relations, human resources management, and communications. Distinctive courses include Hospitality Facilities Management and Design and Lodging Management. The courses in this program relate to the management of both the accommodation and food service facilities used by the public and private sector. The major is administered by the School of Hospitality and Tourism Management. Students may consult the Faculty Advisor or the B.Comm. Program Counsellor for additional information.

For this major, 15.00 of the 20.00 credits are specified as core requirements, 2.50 as restricted electives, and 2.50 electives (including the Liberal Education Requirements of 1.50 credits.) Verified work experience in the hospitality industry is required for students to be eligible for graduation.

Group work is a significant part of core credit work.

**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  
 HTM\*1000 [0.50] Introduction to Hospitality and Tourism Management  
 POLS\*1400 [0.50] Issues in Canadian Politics  
 PSYC\*1200 [0.50] Dynamics of Behaviour

One of:\*

CHEM\*1100 [0.50] Chemistry Today  
 HTM\*2700 [0.50] Introductory Foods

\*CHEM\*1100 must be taken by students without Grade 12U or OAC Chemistry. If CHEM\*1100 is not required, then a total of 3.50 restricted electives are required.

**Semester 2**

ECON\*1100 [0.50] Introductory Macroeconomics  
 HTM\*2000 [0.50] Hospitality and Tourism Purchasing Management  
 HTM\*2100 [0.50] Lodging Operations  
 HTM\*2120 [0.50] Hospitality and Tourism Marketing I  
 0.50 from List A or List B or electives

**Semester 3**

2.50 from List A or List B or electives

**Semester 4**

STAT\*2060 [0.50] Statistics for Business Decisions  
 2.00 from List A or List B or electives

**Semester 5**

ECON\*3460 [0.50] Introduction to Finance  
 HTM\*3030 [0.50] Beverage Management  
 1.50 from List A or List B or electives

**Semester 6**

HTM\*3120 [0.50] Operations Analysis in the Hospitality and Tourism Industry  
 2.00 from List A or List B or electives

**Semester 7**

2.50 from List A or List B or electives

**Semester 8**

2.50 from List A or List B or electives

**List A - Further Required Courses**

The following 8.50 credits are also required. Further details on the scheduling of courses will be provided in writing prior to each course selection period by the School's faculty advisor.

**Semester 1 or 2**

HTM\*2700 [0.50] Introductory Foods

**Semester 2 or 3**

HTM\*2010 [0.50] Hospitality and Tourism Business Communications

**Semester 3 or 4**

AGEC\*2220 [0.50] Financial Accounting  
 MCS\*2020 [0.50] Information Management  
 MCS\*3040 [0.50] Business and Consumer Law  
 HTM\*2030 [0.50] Control Systems in the Hospitality and Tourism Industry  
 HTM\*2200 [0.50] Organizational Behaviour I

**Semester 4 or 5**

HTM\*3070 [0.50] Hospitality and Tourism Management Accounting

**Semester 5 or 6**

AGEC\*3320 [0.50] Financial Management  
 HTM\*3000 [0.50] Human Resources Management  
 HTM\*3080 [0.50] Hospitality and Tourism Marketing II  
 HTM\*3090 [1.00] Foodservice Operations Management

**Semester 7 or 8**

HTM\*4090 [0.50] Hospitality and Tourism Facilities Management and Design  
 HTM\*4100 [0.50] Organizational Behaviour II  
 HTM\*4190 [0.50] Hospitality and Tourism Operations Planning  
 HTM\*4200 [0.50] Policy Issues in Hospitality and Tourism Management

**List B - Restricted Electives**

In addition to the 14.50 required credits listed above, students must take a minimum of 3.00 restricted electives throughout the program. Students may choose to explore a variety of subjects or may choose to study an area allied to their major in some depth. 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 dealing with the social and economic environment of business firms and other administrative entities in the hospitality industry:*

ECON\*2310 [0.50] Intermediate Microeconomics  
 ECON\*2410 [0.50] Intermediate Macroeconomics  
 ECON\*3510 [0.50] Money, Credit and the Financial System  
 ECON\*3520 [0.50] Labour Economics  
 ECON\*3560 [0.50] Theory of Finance  
 PHIL\*1010 [0.50] Introductory Philosophy: Social and Political Issues  
 PHIL\*2600 [0.50] Business and Professional Ethics  
 SOC\*2190 [0.50] Technology and Society

*Courses for those interested in developing hospitality related real estate.*

MCS\*1820 [0.50] Real Estate and Housing  
 MCS\*2820 [0.50] Real Estate Finance  
 MCS\*3810 [0.50] Real Estate Market Analysis  
 MCS\*3820 [0.50] Real Estate Development  
 MCS\*3890 [0.50] Property Management  
 MCS\*4820 [0.50] Real Estate Appraisal  
 MCS\*4840 [0.50] Housing and Real Estate Law

*Courses dealing with human behaviour particularly as related to work and work groups:*

ANTH\*1150 [0.50] Introduction to Anthropology  
 ECON\*2200 [0.50] Industrial Relations  
 PSYC\*2310 [0.50] Introduction to Social Psychology

SOAN*2040	[0.50]	Globalization of Work and Organizations
SOC*1100	[0.50]	Sociology
<i>Courses dealing with market forces and consumer behaviour:</i>		
AGEC*4360	[0.50]	Marketing Research
MCS*1000	[0.50]	Introductory Marketing
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
MCS*3600	[0.50]	Consumer Information Processes
MCS*3620	[0.50]	Marketing Communications
<i>Courses related to the study of tourism:</i>		
EDRD*3500	[0.50]	Recreation and Tourism Planning
GEOG*1220	[0.50]	Human Impact on the Environment
GEOG*3490	[0.50]	Tourism and Environment
HTM*2050	[0.50]	Dimensions of Tourism
HTM*2170	[0.50]	Canadian Tourism Policy, Planning and Development
HTM*3250	[0.50]	Tourism in Canada
<i>Courses relating to institutional foodservice management:</i>		
AGR*1250	[0.50]	Agrifood System Trends & Issues
CHEM*1040	[0.50]	General Chemistry I
CHEM*1050	[0.50]	General Chemistry II
FOOD*2150	[0.50]	Introduction to Nutritional and Food Science
FOOD*3700	[0.50]	Sensory Evaluation of Foods
HTM*2740	[0.50]	Cultural Aspects of Food
NUTR*1010	[0.50]	Nutrition and Society
NUTR*2050	[0.50]	Family and Community Nutrition
<i>Specialized courses in Hospitality and Tourism Management:</i>		
HTM*2070	[0.50]	Meetings and Convention Management
HTM*3060	[0.50]	Lodging Management
HTM*3150	[0.50]	Experiential Learning in the Hospitality Industry
HTM*3180	[0.50]	Casino Operations Management
HTM*3200	[0.50]	Club Management Operations
HTM*3780	[0.50]	Economics of Food Usage
HTM*4050	[0.50]	Wine and Oenology
HTM*4110	[0.50]	Restaurant Operations
HTM*4120	[0.50]	Entrepreneurship in Hospitality and Tourism
HTM*4130	[0.50]	Current Management Topics
HTM*4140	[0.50]	Current Management Topics
HTM*4150	[0.50]	Current Management Topics
HTM*4500	[0.50]	Special Study in Hospitality and Tourism
<i>Other subjects related to the study of administration:</i>		
AGEC*2230	[0.50]	Management Accounting
AGEC*3310	[0.50]	Operations Management
AGEC*3330	[0.50]	Intermediate Accounting
AGEC*4250	[0.50]	Business Policy
AGEC*4370	[0.50]	Marketing Management
AGEC*4410	[0.50]	Sales and Sales Management
MCS*2100	[0.50]	Personal Financial Management
<i>Other restricted electives:</i>		
CIS*1000	[0.50]	Introduction to Computer Applications
MCS*3010	[0.50]	Quality Management
ECON*3520	[0.50]	Labour Economics
ENGL*1200	[0.50]	Reading the Contemporary World
ENGL*1410	[0.50]	Major English Writers
PHIL*2100	[0.50]	Critical Thinking
REXT*3040	[0.50]	Communication Process
REXT*3060	[0.50]	International Communication

Students may select up to 2.00 credits in any foreign language as restricted electives.

### Electives and Liberal Education Requirement

In addition to the 15.00 required credits and the 2.50 restricted electives, the student has 2.50 electives throughout the program. These electives must include 1.50 credits toward the B.Comm. Liberal Education Requirement.

### Hotel and Food Administration (Co-op) (HAFA:C)

#### School of Hospitality and Tourism Management, College of Social and Applied Human Sciences

The principal aim of the Hotel and Food Administration 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 major is administered by the School of Hospitality and Tourism Management. Students may consult the departmental Co-op Advisor or the B.Comm. Program Counsellor for additional information. The co-op work program consists of one twelve-month period. The work semester begins at the end of the second year and extends from May to April. The co-op program is completed over a 5 year period. The academic program consists of 20.00 credits, 15.50 of which are specified as core requirements, 2.00 as restricted electives, and 2.50 as electives.

### 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 - Fall

ECON*1050	[0.50]	Introductory Microeconomics
HTM*1000	[0.50]	Introduction to Hospitality and Tourism Management
POLS*1400	[0.50]	Issues in Canadian Politics
PSYC*1200	[0.50]	Dynamics of Behaviour

One of:\*

CHEM*1100	[0.50]	Chemistry Today
HTM*2700	[0.50]	Introductory Foods

\*CHEM\*1100 must be taken by students without Grade 12U or OAC Chemistry. If CHEM\*1100 is not required, then a total of 3.00 restricted electives are required.

#### Semester 2 - Winter

ECON*1100	[0.50]	Introductory Macroeconomics
HTM*2000	[0.50]	Hospitality and Tourism Purchasing Management
HTM*2100	[0.50]	Lodging Operations
HTM*2120	[0.50]	Hospitality and Tourism Marketing I

0.50 from List A or List B or electives

#### Semester 3 - Fall

COOP*1100	[0.00]	Introduction to Co-operative Education
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2.50 from List A or List B or electives

#### Semester 4 - Winter

STAT*2060	[0.50]	Statistics for Business Decisions
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2.00 from List A or List B or electives

#### Summer Semester

COOP*1000	[0.00]	Co-op Work Term I
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#### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Winter Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Semester 5 - Fall

ECON*3460	[0.50]	Introduction to Finance
HTM*3030	[0.50]	Beverage Management

1.50 from List A or List B or electives

#### Semester 6 - Winter

HTM*3120	[0.50]	Operations Analysis in the Hospitality and Tourism Industry
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2.00 from List A or List B or electives

#### Semester 7 - Fall

2.50 from List A or List B or electives

#### Semester 8 - Winter

HTM*4300	[0.50]	Co-operative Education Seminar
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2.00 from List A or List B or electives

**Note:** For courses included in List A or List B refer to the regular major.

### Human Resources Management (HRM)

#### Department of Psychology, College of Social and Applied Human Sciences

The HRM program provides some basic preparation for students contemplating a career as a Human Resources practitioner, and for potential certification by the Human Resources Professionals Association of Ontario (HRPAO). It complements a traditional business core with an emphasis on issues relating to people and the workplace. The program combines conceptual and quantitative elements and promotes the integration of theory with practice. A feature of the program is a required applied research course, where students conduct group projects in workplace settings under the direction of a faculty member.

Presently the HRM program meets all four academic requirements of the Tier I Compulsory Subjects set out by the Human Resources Professionals Association of Ontario. Our objective is to meet 50% of the Tier II Specialized Subjects.

For this major, 15.00 of the 20.00 credits are specified as core requirements and the remaining 5.00 as electives. A list of suggested electives follows the description of required courses.

**Note:** Psychology Courses designated with (H) in Section XII--Course Descriptions are Honours level Psychology courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology or registration in the Human Resources Management major of the Bachelor of Commerce program.

### 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**

MCS*1000	[0.50]	Introductory Marketing
ECON*1050	[0.50]	Introductory Microeconomics
POLS*1400	[0.50]	Issues in Canadian Politics
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 electives

**Semester 2**

ECON*1100	[0.50]	Introductory Macroeconomics
PSYC*1100	[0.50]	Principles of Behaviour
PSYC*2010	[0.50]	Quantification in Psychology
PSYC*2310	[0.50]	Introduction to Social Psychology

0.50 electives

**Semester 3**

AGEC*2220	[0.50]	Financial Accounting
ECON*2200	[0.50]	Industrial Relations
ECON*2310	[0.50]	Intermediate Microeconomics
PSYC*2360	[0.50]	Introductory Research Methods

0.50 electives

**Semester 4**

AGEC*2230	[0.50]	Management Accounting
MCS*2020	[0.50]	Information Management
HTM*2200	[0.50]	Organizational Behaviour I
PHIL*2600	[0.50]	Business and Professional Ethics

0.50 electives

**Semester 5**

AGEC*3320	[0.50]	Financial Management
MCS*3040	[0.50]	Business and Consumer Law
PSYC*3060	[0.50]	Occupational Health Psychology
PSYC*3090	[0.50]	Training and Development

0.50 electives

**Semester 6**

AGEC*3310	[0.50]	Operations Management
ECON*3560	[0.50]	Theory of Finance
HTM*3000	[0.50]	Human Resources Management
PSYC*3010	[0.50]	Compensation Systems

0.50 electives

**Semester 7**

ECON*3520	[0.50]	Labour Economics
HTM*4100	[0.50]	Organizational Behaviour II
PSYC*4100	[0.50]	Applied Research in Human Resources Management

1.00 electives

**Semester 8**

AGEC*4250	[0.50]	Business Policy
HTM*4160	[0.50]	Human Resources Planning
PSYC*4330	[0.50]	Advanced Topics in I/O Psychology (H)

1.00 electives

**Electives**

The following is a list of courses which may be of interest to students selecting their electives.

AGEC*4370	[0.50]	Marketing Management
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2740	[0.50]	Economic Statistics
ECON*4800	[0.50]	Theory of Strategic Management
MATH*1000	[0.50]	Introductory Calculus
PSYC*2740	[0.50]	Personality
PSYC*3250	[0.50]	Psychological Measurement
SOAN*2040	[0.50]	Globalization of Work and Organizations
SOC*1100	[0.50]	Sociology

**Management Economics in Industry and Finance (MEIF)**

Department of Economics, College of Social and Applied Human Sciences

The Management Economics in Industry and Finance major is designed to offer students an appreciation of business problems in the areas of industrial organization and finance using the analytical orientation of the discipline of Economics and the tools of Business Management, Marketing and Accounting. This major combines the applied thrust of business courses with the analytical rigor of Economics.

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, Business Administration, Law, and Public Policy. The major is administered by the Department of Economics and students are urged to consult the faculty advisor.

In addition to the Management Economics in Industry and Finance core, students will choose their restricted electives from the List of Restricted Electives. In selecting the restricted electives, students have a choice of either following a program of studies that covers a wide spectrum of topics in the areas of Industry and Finance or declaring an Area of Emphasis if they wish to pursue the study of Industry or Finance in more depth. Students that identify an Area of Emphasis will choose their restricted electives from the appropriate list of restricted electives below. Students wishing to have an Area of Emphasis are encouraged to declare their Area of Emphasis by Semester 4, in order to facilitate the availability of restricted electives. A planning guide is available in the department. Students should note that most courses carry prerequisites and that ECON\*1050 and ECON\*1100 are normally prerequisites for all other courses in Economics.

Students who fail any Economics course twice or who do not achieve a 65% average in Economics courses taken during the first 4 semesters in this major are likely to encounter difficulties in the more advanced courses. They are strongly advised to consult the faculty advisor in Economics to discuss the options available.

For this major, 10.00 credits are specified, 5.00 are restricted electives and 5.00 are free electives. (1.50 Liberal Education Requirement; 2.00 free electives).

**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
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One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

One of:

MATH*1000	[0.50]	Introductory Calculus
MATH*1080	[0.50]	Elements of Calculus I
MATH*1200	[0.50]	Calculus I

1.00 electives

**Semester 2**

AGEC*2220	[0.50]	Financial Accounting
MCS*1000	[0.50]	Introductory Marketing
ECON*1100	[0.50]	Introductory Macroeconomics

1.00 electives

**Semester 3**

AGEC*2230	[0.50]	Management Accounting
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2720	[0.50]	Business History

One of:

MCS*3040	[0.50]	Business and Consumer Law
ECON*2770	[0.50]	Introductory Mathematical Economics

0.50 electives

**Note:** One of ECON\*2770 and MCS\*3040 must be taken in Semester 3; the other must be taken in Semester 4.

**Semester 4**

ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2740	[0.50]	Economic Statistics

One of:

ECON*2770	[0.50]	Introductory Mathematical Economics
MCS*3040	[0.50]	Business and Consumer Law

1.00 electives or restricted electives

**Semester 5**

AGEC*3310	[0.50]	Operations Management
AGEC*3320	[0.50]	Financial Management
ECON*3560	[0.50]	Theory of Finance
ECON*3740	[0.50]	Introduction to Econometrics

0.50 electives or restricted electives

**Semester 6**

ECON*3600	[0.50]	Macroeconomics in an Open Economy
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2.00 electives or restricted electives

**Note:** ECON\*4710 and ECON\*4810 are recommended for students wishing to pursue graduate studies.

**Semester 7**

HTM*4390	[0.50]	Individuals and Groups in Organizations
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2.00 electives or restricted electives

**Semester 8**

ECON*4800	[0.50]	Theory of Strategic Management
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2.00 electives or restricted electives

The restricted electives for the MEIF major are listed below. By choosing from this list, students will obtain a broad exposure to the areas of Finance and Industry. If, instead,

students wish to obtain a greater degree of specialization in either the area of Finance or Industry, they may opt to diverge from the restricted electives given below and instead choose their restricted electives so as to satisfy the Finance Area of Emphasis Restricted Electives or the Industry Area of Emphasis Restricted Electives.

### Restricted Electives

4.00 additional credits in economics, of which

- at least 0.50 credits can be at the 2000 level
- at least 0.50 credits must be at the 4000 level - only one of ECON\*4900, ECON\*4910 may count as one of the required minimum number of 4000 level economics credits in the B.Comm. program.
- 1.50 credits are from the following:
 

ECON*3510	[0.50]	Money, Credit and the Financial System
ECON*3520	[0.50]	Labour Economics
ECON*3530	[0.50]	Industrial Organization
ECON*3660	[0.50]	Economics of Equity Markets

1.00 credits from the following:

AGEC*3330	[0.50]	Intermediate Accounting
AGEC*4240	[0.50]	Futures and Options Markets
AGEC*4250	[0.50]	Business Policy
AGEC*4360	[0.50]	Marketing Research
AGEC*4370	[0.50]	Marketing Management
AGEC*4410	[0.50]	Sales and Sales Management

### Finance Area of Emphasis Restricted Electives:

Students must take the following:

ECON*3510	[0.50]	Money, Credit and the Financial System
ECON*3660	[0.50]	Economics of Equity Markets
ECON*3100	[0.50]	Game Theory
ECON*3710	[0.50]	Advanced Microeconomics
ECON*4560	[0.50]	Advanced Topics in Finance
AGEC*4240	[0.50]	Futures and Options Markets

2.00 additional credits in economics, of which

- 0.50 at most credits can be at the 2000 level
- at least 1.00 credits must be at the 4000 level - only one of ECON\*4900, ECON\*4910 may count as one of the required minimum number of 4000 level economics credits in the B.Comm. program.

### Industry Area of Emphasis Restricted Electives:

Students must take the following:

ECON*3530	[0.50]	Industrial Organization
ECON*3100	[0.50]	Game Theory
ECON*3710	[0.50]	Advanced Microeconomics
ECON*4780	[0.50]	Topics in Industrial Organization

One of:

ECON*3200	[0.50]	Economics of Industrial Relations
ECON*3520	[0.50]	Labour Economics
ECON*3580	[0.50]	Economics of Regulation

2.00 additional credits in economics, of which

- at most 0.50 credits can be at the 2000 level
- at least 1.00 credits must be at the 4000 level - only one of ECON\*4900, ECON\*4910 may count as one of the required minimum number of 4000 level economics credits in the B.Comm. program.

0.50 credits from the following:

AGEC*3330	[0.50]	Intermediate Accounting
AGEC*4240	[0.50]	Futures and Options Markets
AGEC*4250	[0.50]	Business Policy
AGEC*4360	[0.50]	Marketing Research
AGEC*4370	[0.50]	Marketing Management
AGEC*4410	[0.50]	Sales and Sales Management

### Management Economics in Industry and Finance (Co-op) (MEIF:C)

Department of Economics, College of Social and Applied Human Sciences

A principal aim of the Co-op program in Management Economics in Industry and Finance is to facilitate the transition of students from academic studies to a professional career by enhancing the integration of theory and practice.

The Co-op program consists of two eight month work terms. The first work term begins after the second year and extends from January to August. The Co-op program is normally completed over a 5 year period.

To be eligible to continue in the Co-op major, students must maintain a satisfactory average, must complete all course requirements as scheduled and must obtain a minimum evaluation of "satisfactory" on all required work term reports. Consult the Co-op advisor or Department for additional program information.

### 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
One of:		
CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming
One of:		
MATH*1000	[0.50]	Introductory Calculus
MATH*1080	[0.50]	Elements of Calculus I
MATH*1200	[0.50]	Calculus I

1.00 electives

#### Semester 2 - Winter

AGEC*2220	[0.50]	Financial Accounting
MCS*1000	[0.50]	Introductory Marketing
ECON*1100	[0.50]	Introductory Macroeconomics

1.00 electives

#### Semester 3 - Fall

AGEC*2230	[0.50]	Management Accounting
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2720	[0.50]	Business History
ECON*2740	[0.50]	Economic Statistics

0.50 electives

#### Semester 4 - Winter

MCS*3040	[0.50]	Business and Consumer Law
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2770	[0.50]	Introductory Mathematical Economics
ECON*3560	[0.50]	Theory of Finance

0.50 electives

#### Summer Semester

COOP*1000	[0.00]	Co-op Work Term I
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#### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Semester 5 - Winter

AGEC*3310	[0.50]	Operations Management
ECON*3600	[0.50]	Macroeconomics in an Open Economy
ECON*3740	[0.50]	Introduction to Econometrics

1.00 electives or restricted electives

#### Semester 6 - Fall

AGEC*3320	[0.50]	Financial Management
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2.00 electives or restricted electives

**Note:** If in Finance or Industry take ECON\*3710.

**Note:** ECON\*4710 and ECON\*4810 are recommended for students wishing to pursue graduate studies.

#### Winter Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Summer Semester

COOP*4000	[0.00]	Co-op Work Term IV
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#### Semester 7 - Fall

HTM*4390	[0.50]	Individuals and Groups in Organizations
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2.00 electives or restricted electives

#### Semester 8 - Winter

ECON*4800	[0.50]	Theory of Strategic Management
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2.00 electives or restricted electives

### Restricted Electives

4.00 additional credits in economics, of which

- at least 0.50 credits can be at the 2000 level
- at least 0.50 credits must be at the 4000 level - only one of ECON\*4900, ECON\*4910 may count as one of the required minimum number of 4000 level economics credits in the B.Comm. program.
- 1.50 credits are from the following:
 

ECON*3510	[0.50]	Money, Credit and the Financial System
ECON*3520	[0.50]	Labour Economics
ECON*3530	[0.50]	Industrial Organization
ECON*3660	[0.50]	Economics of Equity Markets

1.00 credits from the following:

AGEC*3330	[0.50]	Intermediate Accounting
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AGEC*4240	[0.50]	Futures and Options Markets
AGEC*4250	[0.50]	Business Policy
AGEC*4360	[0.50]	Marketing Research
AGEC*4370	[0.50]	Marketing Management
AGEC*4410	[0.50]	Sales and Sales Management

**Finance Area of Emphasis Restricted Electives:**

Students must take the following:

AGEC*4240	[0.50]	Futures and Options Markets
ECON*3510	[0.50]	Money, Credit and the Financial System
ECON*3660	[0.50]	Economics of Equity Markets
ECON*3100	[0.50]	Game Theory
ECON*3710	[0.50]	Advanced Microeconomics
ECON*4560	[0.50]	Advanced Topics in Finance

2.00 additional credits in economics, of which

- 0.50 at most credits can be at the 2000 level
- at least 1.00 credits must be at the 4000 level - only one of ECON\*4900, ECON\*4910 may count as one of the required minimum number of 4000 level economics credits in the B.Comm. program.

**Industry Area of Emphasis Restricted Electives:**

Students must take the following:

ECON*3530	[0.50]	Industrial Organization
ECON*3100	[0.50]	Game Theory
ECON*3710	[0.50]	Advanced Microeconomics
ECON*4780	[0.50]	Topics in Industrial Organization

One of:

ECON*3200	[0.50]	Economics of Industrial Relations
ECON*3520	[0.50]	Labour Economics
ECON*3580	[0.50]	Economics of Regulation

2.00 additional credits in Economics, of which

- at most 0.50 credits can be at the 2000 level
- at least 1.00 credits must be at the 4000 level - only one of ECON\*4900, ECON\*4910 may count as one of the required minimum number of 4000 level economics credits in the B.Comm. program.

0.50 credits from the following:

AGEC*3330	[0.50]	Intermediate Accounting
AGEC*4240	[0.50]	Futures and Options Markets
AGEC*4250	[0.50]	Business Policy
AGEC*4360	[0.50]	Marketing Research
AGEC*4370	[0.50]	Marketing Management
AGEC*4410	[0.50]	Sales and Sales Management

**Marketing Management (MKMN)****Department of Marketing and Consumer Studies, College of Social and Applied Human Sciences**

The Marketing Management major is interdisciplinary, follows a liberal education philosophy, and is built on our Department's long standing expertise in the field of consumer research. Therefore, the courses to be followed span departments and colleges across the University and are designed to support the University's learning objectives.

The Department of Marketing and Consumer Studies recognizes that we are not only responsible for preparing students for a career in marketing but for educating them so that they can be active, engaged citizens. This can only result from a balanced curriculum of marketing and liberal education courses capable of providing students with an understanding of the world they will work and live in, and the problem solving, communication, and visualization skills needed to function effectively in it. Therefore, as students learn about the management and leadership of product and services marketing in a global economy, they will be prepared to work and live effectively in today's world and to be flexible enough to pursue a variety of marketing career paths and diverse leadership roles. The major is administered by the Department of Marketing and Consumer Studies in the College of Social and Applied Human Sciences. Students can contact the B.Comm. Program Counsellors or the Faculty Advisors if they have questions.

**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**

MCS*1000	[0.50]	Introductory Marketing
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1000	[0.50]	Introductory Calculus
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 from List A or electives

Note: Students who are exceptionally strong in mathematics may consult with their academic advisor to substitute an alternative mathematics course for MATH\*1000 (MATH\*1080 or MATH\*1200).

**Semester 2**

AGEC*2220	[0.50]	Financial Accounting
ECON*1100	[0.50]	Introductory Macroeconomics
PSYC*2310	[0.50]	Introduction to Social Psychology

0.50 from List A

0.50 electives

**Semester 3**

AGEC*2230	[0.50]	Management Accounting
ECON*2310	[0.50]	Intermediate Microeconomics
MCS*2020	[0.50]	Information Management
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour

0.50 from List B

Note: MCS\*2600 may be taken in Semester 4.

**Semester 4**

ECON*2410	[0.50]	Intermediate Macroeconomics
MCS*3040	[0.50]	Business and Consumer Law
STAT*2060	[0.50]	Statistics for Business Decisions

0.50 from List B

One of:

HTM*2200	[0.50]	Organizational Behaviour I
ISS*2500	[0.50]	Management in Organizations

**Semester 5**

AGEC*3320	[0.50]	Financial Management
MCS*3020	[0.50]	Services Marketing
MCS*3030	[0.50]	Research Methods
MCS*3610	[0.50]	Consumer Economics

0.50 from List A and/or up to 0.50 electives (if MCS\*3100 to be taken in Semester 6)

Note: Students only take one of MCS\*3610 in Semester 5 OR MCS\*3100 in Semester 6.

Note: MCS\*3020, MCS\*3030, MCS\*3610 may be taken in Semester 6.

**Semester 6**

AGEC*3310	[0.50]	Operations Management
MCS*3010	[0.50]	Quality Management
MCS*3100	[0.50]	Economic Behaviour of Households
MCS*3620	[0.50]	Marketing Communications

0.50 from List A and/or up to 0.50 electives

Note: Students only take one of MCS\*3610 in Semester 5 OR MCS\*3100 in Semester 6.

Note: MCS\*3100 may be taken in Semester 5 and MCS\*3620 may be taken in Semester 7.

**Semester 7**

MCS*3600	[0.50]	Consumer Information Processes
MCS*4040	[0.50]	Management in Product Development
ECON*3560	[0.50]	Theory of Finance

1.00 electives

Note: MCS\*3600 may be taken in Semester 6.

**Semester 8**

AGEC*4250	[0.50]	Business Policy
MCS*4050	[0.50]	The Evolution of Capitalism: A Canadian Perspective
MCS*4370	[0.50]	Marketing Strategy
MCS*4600	[0.50]	International Marketing

0.50 electives

Note: MCS\*4370 may be taken in Semester 7.

**List A - Restricted Electives (choose 2 from any 1 subgroup)**

These courses have been selected to help students broaden their international and cross-cultural perspectives.

**French Language Courses**

FREN*1100	[0.50]	Basic French: Listening
FREN*1150	[0.50]	Elementary French
FREN*1200	[0.50]	French Language I
FREN*2020	[0.50]	France: Literature and Society
FREN*2030	[0.50]	French Language II
FREN*2060	[0.50]	Quebec: Literature and Society
FREN*3530	[0.50]	Business French

**German Language Courses**

GERM*1100	[0.50]	Introductory German I
GERM*1110	[0.50]	Introductory German II
GERM*2400	[0.50]	Contemporary Germany
GERM*2490	[0.50]	Intermediate German I

**History and Politics Courses**

EURO*1050	[0.50]	The Emergence of a United Europe
EURO*2070	[0.50]	European Integration, 1957-1992
HIST*1150	[0.50]	20th-Century Global History
HIST*2510	[0.50]	The Emergence of Modern European Society 1789-1945

HIST*2910	[0.50]	History of Modern Asia
HIST*3090	[0.50]	Nationalism and Internationalism in Europe 1914-1957
POLS*1500	[0.50]	World Politics
POLS*2100	[0.50]	The State in Comparative Perspective
POLS*3080	[0.50]	Politics of Latin America
POLS*3280	[0.50]	Modern Political Ideologies
POLS*3460	[0.50]	Communism and Post-Communism
POLS*3890	[0.50]	Government and Politics of India
POLS*3920	[0.50]	Modern China

**Italian Language Courses**

ITAL*1060	[0.50]	Introductory Italian I
ITAL*1070	[0.50]	Introductory Italian II
ITAL*2060	[0.50]	Intermediate Italian I
ITAL*2070	[0.50]	Intermediate Italian II

**Spanish Language Courses**

SPAN*1100	[0.50]	Introductory Spanish
SPAN*1110	[0.50]	Intermediate Spanish
SPAN*2000	[0.50]	Spanish Language I
SPAN*2010	[0.50]	Spanish Language II
SPAN*2040	[0.50]	Spanish Civilization

**List B - Restricted Electives (choose 2)**

This group of courses encourages students to increase their fundamental background and/or add to business applications.

AGEC*4410	[0.50]	Sales and Sales Management
MCS*2100	[0.50]	Personal Financial Management
HTM*3000	[0.50]	Human Resources Management
POLS*1400	[0.50]	Issues in Canadian Politics
POLS*2250	[0.50]	Public Administration
SOC*1100	[0.50]	Sociology

One of:

PHIL*2100	[0.50]	Critical Thinking
PHIL*2600	[0.50]	Business and Professional Ethics

**Marketing Management (Co-op) (MKMN:C)****Department of Marketing and Consumer Studies, College of Social and Applied Human Sciences**

A principal aim of the Co-op program is to facilitate the transition of students from academic studies to a professional career in Marketing Management by enhancing the integration of theory and practice.

The Co-op program consists of two eight month work terms. The first work term begins after the second year. The second work term commences after the third year of studies. The Co-op program is normally completed over a 5 year period.

To be eligible to continue in the Co-op Major students must maintain a satisfactory average, must complete all course requirements as scheduled and must obtain a minimum evaluation of "satisfactory" on all required work term reports. Consult the Co-op advisor or Department for additional information.

**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 - Fall**

MCS*1000	[0.50]	Introductory Marketing
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1000	[0.50]	Introductory Calculus
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 from List A or electives

Note: Students who are exceptionally strong in mathematics may consult with their academic advisor to substitute an alternative mathematics course for MATH\*1000 (MATH\*1080 or MATH\*1200).

**Semester 2 - Winter**

AGEC*2220	[0.50]	Financial Accounting
ECON*1100	[0.50]	Introductory Macroeconomics
PSYC*2310	[0.50]	Introduction to Social Psychology
STAT*2060	[0.50]	Statistics for Business Decisions

0.50 from List A or 0.50 electives

**Semester 3 - Fall**

AGEC*2230	[0.50]	Management Accounting
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*2310	[0.50]	Intermediate Microeconomics
MCS*2020	[0.50]	Information Management
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour

0.50 from List B

**Semester 4 - Winter**

ECON*2410	[0.50]	Intermediate Macroeconomics
MCS*3030	[0.50]	Research Methods
MCS*3040	[0.50]	Business and Consumer Law

0.50 from List B

One of:

HTM*2200	[0.50]	Organizational Behaviour I
ISS*2500	[0.50]	Management in Organizations

**Summer Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

AGEC*3310	[0.50]	Operations Management
MCS*3010	[0.50]	Quality Management
MCS*3020	[0.50]	Services Marketing
MCS*3100	[0.50]	Economic Behaviour of Households
MCS*3600	[0.50]	Consumer Information Processes

0.50 electives (if MCS\*3610 to be taken in Semester 6)

Note: Students only take one of MCS\*3100 in Semester 5 OR MCS\*3610 in Semester 6.

**Semester 6 - Fall**

AGEC*3320	[0.50]	Financial Management
MCS*3610	[0.50]	Consumer Economics
MCS*3620	[0.50]	Marketing Communications

0.50 from List A and/or up to 1.00 electives

Note: Students only take one of MCS\*3100 in Semester 5 OR MCS\*3610 in Semester 6.

**Winter Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Summer Semester**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 7 - Fall**

ECON*3560	[0.50]	Theory of Finance
MCS*4040	[0.50]	Management in Product Development
MCS*4050	[0.50]	The Evolution of Capitalism: A Canadian Perspective
MCS*4370	[0.50]	Marketing Strategy

0.50 from List A and/or electives

Note: MCS\*4050 may be taken in Semester 8.

**Semester 8 - Winter**

AGEC*4250	[0.50]	Business Policy
MCS*4600	[0.50]	International Marketing

1.00 or 1.50 electives

**List A -Restricted Electives (choose 2 from any 1 subgroup)**

These courses have been selected to help students broaden their international and cross-cultural perspectives.

**French Language Courses**

FREN*1100	[0.50]	Basic French: Listening
FREN*1150	[0.50]	Elementary French
FREN*1200	[0.50]	French Language I
FREN*2020	[0.50]	France: Literature and Society
FREN*2030	[0.50]	French Language II
FREN*2060	[0.50]	Quebec: Literature and Society
FREN*3530	[0.50]	Business French

**German Language Courses**

GERM*1100	[0.50]	Introductory German I
GERM*1110	[0.50]	Introductory German II
GERM*2400	[0.50]	Contemporary Germany
GERM*2490	[0.50]	Intermediate German I

**History and Politics Courses**

EURO*1050	[0.50]	The Emergence of a United Europe
EURO*2070	[0.50]	European Integration, 1957-1992
HIST*1150	[0.50]	20th-Century Global History
HIST*2510	[0.50]	The Emergence of Modern European Society 1789-1945
HIST*2910	[0.50]	History of Modern Asia
HIST*3090	[0.50]	Nationalism and Internationalism in Europe 1914-1957
POLS*1500	[0.50]	World Politics
POLS*2100	[0.50]	The State in Comparative Perspective
POLS*3080	[0.50]	Politics of Latin America
POLS*3280	[0.50]	Modern Political Ideologies
POLS*3460	[0.50]	Communism and Post-Communism
POLS*3890	[0.50]	Government and Politics of India
POLS*3920	[0.50]	Modern China

**Italian Language Courses**

ITAL*1060	[0.50]	Introductory Italian I
ITAL*1070	[0.50]	Introductory Italian II
ITAL*2060	[0.50]	Intermediate Italian I
ITAL*2070	[0.50]	Intermediate Italian II

**Spanish Language Courses**

SPAN*1100	[0.50]	Introductory Spanish
SPAN*1110	[0.50]	Intermediate Spanish
SPAN*2000	[0.50]	Spanish Language I
SPAN*2010	[0.50]	Spanish Language II
SPAN*2040	[0.50]	Spanish Civilization

**List B - Restricted Electives (choose 2)**

This group of courses encourages students to increase their fundamental background and/or add to business applications.

AGEC*4410	[0.50]	Sales and Sales Management
MCS*2100	[0.50]	Personal Financial Management
HTM*3000	[0.50]	Human Resources Management
POLS*1400	[0.50]	Issues in Canadian Politics
POLS*2250	[0.50]	Public Administration
SOC*1100	[0.50]	Sociology

One of:

PHIL*2100	[0.50]	Critical Thinking
PHIL*2600	[0.50]	Business and Professional Ethics

**Public Management (PMGT)****Department of Political Science, College of Social and Applied Human Sciences**

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 both political 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. A co-ordinated sequence of courses may be capped in the final year by a year-long research project and thesis.

For this major, 16.00 of the 20.00 credits are specified as core requirements and the remaining 4.00 as electives. A list of suggested electives follows the description of required courses.

**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**

MCS*1000	[0.50]	Introductory Marketing
ECON*1050	[0.50]	Introductory Microeconomics
POLS*1400	[0.50]	Issues in Canadian Politics
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 electives

**Semester 2**

ECON*1100	[0.50]	Introductory Macroeconomics
POLS*2250	[0.50]	Public Administration
POLS*2300	[0.50]	Canadian Government

1.00 electives

**Semester 3**

AGEC*2220	[0.50]	Financial Accounting
ECON*2200	[0.50]	Industrial Relations
ECON*2310	[0.50]	Intermediate Microeconomics
POLS*3250	[0.50]	Public Policy: Challenges and Prospects

0.50 electives

**Semester 4**

AGEC*2230	[0.50]	Management Accounting
MCS*2020	[0.50]	Information Management
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
POLS*3270	[0.50]	Local Government in Ontario
STAT*2060	[0.50]	Statistics for Business Decisions

**Semester 5**

AGEC*3310	[0.50]	Operations Management
AGEC*3320	[0.50]	Financial Management
MCS*3040	[0.50]	Business and Consumer Law
POLS*3110	[0.50]	Politics of Ontario

0.50 electives

**Semester 6**

ECON*3610	[0.50]	Public Economics
PHIL*2600	[0.50]	Business and Professional Ethics
POLS*3210	[0.50]	The Constitution and Canadian Federalism
POLS*3670	[0.50]	Comparative Public Policy and Administration

0.50 electives

**Semester 7**

ECON*3560	[0.50]	Theory of Finance
HTM*3000	[0.50]	Human Resources Management
POLS*3470	[0.50]	Business-Government Relations in Canada

One of:

POLS*4970	[0.50]	Honours Political Science Research I
0.50 credits at the 4000 level in Political Science		

0.50 electives

**Semester 8**

AGEC*4250	[0.50]	Business Policy
HTM*4390	[0.50]	Individuals and Groups in Organizations
POLS*4250	[0.50]	Problems in Public Administration and Public Policy

One of:

POLS*4980	[0.50]	Honours Political Science Research II
0.50 credits at the 4000 level in Political Science		

0.50 electives

**Electives**

The following is a list of courses which may be of interest to students selecting their electives.

ECON*2410	[0.50]	Intermediate Macroeconomics
POLS*3330	[0.50]	Politics and Trade Liberalization in the Americas
POLS*3370	[0.50]	Environmental Policy Formation and Administration
POLS*3440	[0.50]	Corruption, Scandal and Political Ethics
POLS*3790	[0.50]	The Political Economy of International Relations
POLS*3940	[0.50]	Accountability and Canadian Government
SOAN*2040	[0.50]	Globalization of Work and Organizations

**Public Management (Co-op) (PMGT:C)****Department of Political Science, College of Social and Applied Human Sciences**

A principal aim of the Co-op program in Public Management is to facilitate the transition of students from academic studies to professional career in government or the private sector by enhancing the integration of theory and practice.

Students who want to graduate with the Co-op designation must complete a minimum of four of the five work terms, including those in the fall and winter semesters and two of the three summer placements. In other words, should students so choose, one of the three summer work placements can be optional.

To be eligible to continue in the Co-op major, students must maintain a satisfactory average, complete all course requirements as scheduled, and obtain a minimum evaluation of "satisfactory" on all work term reports. Consult the Co-op advisor or Department for additional program information.

**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 - Fall**

MCS*1000	[0.50]	Introductory Marketing
ECON*1050	[0.50]	Introductory Microeconomics
POLS*1400	[0.50]	Issues in Canadian Politics
PSYC*1200	[0.50]	Dynamics of Behaviour

0.50 electives

**Semester 2 - Winter**

ECON*1100	[0.50]	Introductory Macroeconomics
POLS*2250	[0.50]	Public Administration
POLS*2300	[0.50]	Canadian Government

1.00 electives

**Semester 3 - Fall**

AGEC*2220	[0.50]	Financial Accounting
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*2200	[0.50]	Industrial Relations
ECON*2310	[0.50]	Intermediate Microeconomics
POLS*3250	[0.50]	Public Policy: Challenges and Prospects

0.50 electives

**Semester 4 - Winter**

AGEC*2230	[0.50]	Management Accounting
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour

POLS*3270	[0.50]	Local Government in Ontario
STAT*2060	[0.50]	Statistics for Business Decisions
0.50 electives		
<b>Summer Semester</b>		
COOP*1000	[0.00]	Co-op Work Term I
<b>Fall Semester</b>		
COOP*2000	[0.00]	Co-op Work Term II
<b>Semester 5 - Winter</b>		
MCS*2020	[0.50]	Information Management
ECON*3610	[0.50]	Public Economics
PHIL*2600	[0.50]	Business and Professional Ethics
POLS*3210	[0.50]	The Constitution and Canadian Federalism
0.50 electives		

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

AGEC*3310	[0.50]	Operations Management
MCS*3040	[0.50]	Business and Consumer Law
HTM*3000	[0.50]	Human Resources Management
POLS*3110	[0.50]	Politics of Ontario
POLS*3470	[0.50]	Business-Government Relations in Canada

0.50 electives

**Winter Semester**

COOP*4000	[0.00]	Co-op Work Term IV
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**Summer Semester**

COOP*5000	[0.00]	Co-op Work Term V
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**Semester 7 - Fall**

AGEC*3320	[0.50]	Financial Management
ECON*3560	[0.50]	Theory of Finance
HTM*4390	[0.50]	Individuals and Groups in Organizations

One of:

POLS*4970	[0.50]	Honours Political Science Research I
0.50 credits at the 4000 level in Political Science		

0.50 electives

**Semester 8 - Winter**

AGEC*4250	[0.50]	Business Policy
POLS*3670	[0.50]	Comparative Public Policy and Administration
POLS*4250	[0.50]	Problems in Public Administration and Public Policy

One of:

POLS*4980	[0.50]	Honours Political Science Research II
0.50 credits at the 4000 level in Political Science		

0.50 electives

**Electives**

The following is a list of courses which may be of interest to students selecting their electives.

ECON*2410	[0.50]	Intermediate Macroeconomics
POLS*3330	[0.50]	Politics and Trade Liberalization in the Americas
POLS*3370	[0.50]	Environmental Policy Formation and Administration
POLS*3440	[0.50]	Corruption, Scandal and Political Ethics
POLS*3790	[0.50]	The Political Economy of International Relations
POLS*3940	[0.50]	Accountability and Canadian Government
SOAN*2040	[0.50]	Globalization of Work and Organizations

**Real Estate and Housing (REH)****Department of Marketing and Consumer Studies, College of Social and Applied Human Sciences**

The Real Estate and Housing major in the B.Comm. program is one of only two 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.

Students in the Real Estate and Housing major are required to take the courses listed below. In addition, some may wish to make use of groupings of elective courses in order to pursue individual interests or develop additional focus.

Students may consult the departmental Academic Advisor or B.Comm. Program Counsellor for additional information.

**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**

MCS*1000	[0.50]	Introductory Marketing
MCS*1820	[0.50]	Real Estate and Housing
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1000	[0.50]	Introductory Calculus

0.50 electives

Note: Students who are exceptionally strong in mathematics may substitute either MATH\*1080 or MATH\*1200 for MATH\*1000.

**Semester 2**

MCS*1400	[0.50]	Introduction to Design
ECON*1100	[0.50]	Introductory Macroeconomics
POLS*2300	[0.50]	Canadian Government

1.00 electives

**Semester 3**

AGEC*2220	[0.50]	Financial Accounting
MCS*2020	[0.50]	Information Management
ECON*2310	[0.50]	Intermediate Microeconomics
STAT*2060	[0.50]	Statistics for Business Decisions

0.50 electives

**Semester 4**

AGEC*2230	[0.50]	Management Accounting
MCS*2820	[0.50]	Real Estate Finance
MCS*2850	[0.50]	Service Learning in Housing

1.00 electives

**Semester 5**

MCS*3810	[0.50]	Real Estate Market Analysis
MCS*4840	[0.50]	Housing and Real Estate Law *
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*3560	[0.50]	Theory of Finance

0.50 to 1.00 electives

\* This course is offered every other year; should be taken in Semester 5 or 7.

**Semester 6**

MCS*3030	[0.50]	Research Methods
MCS*3820	[0.50]	Real Estate Development
ECON*3510	[0.50]	Money, Credit and the Financial System
LARC*2820	[0.50]	Urban and Regional Planning

0.50 electives

**Semester 7**

AGEC*3320	[0.50]	Financial Management
MCS*4820	[0.50]	Real Estate Appraisal
ECON*3500	[0.50]	Urban Economics
HTM*4390	[0.50]	Individuals and Groups in Organizations

0.50 electives or MCS\*4840 or if not taken in Semester 5

**Semester 8**

MCS*3890	[0.50]	Property Management
MCS*4810	[0.50]	Real Estate and Housing Project
POLS*3270	[0.50]	Local Government in Ontario

1.00 electives

**Real Estate and Housing (Co-op) (REH:C)****Department of Marketing and Consumer Studies, College of Social and Applied Human Sciences**

A principal aim of the Co-op program is to facilitate the transition of students from academic studies to a professional career in the real estate industry by enhancing the integration of theory and practice.

The Co-op program consists of two eight month work terms. The Co-op program is normally completed over a 5 year period.

To be eligible to continue in the Co-op Major students must maintain a satisfactory average, must complete all course requirements as scheduled and must obtain a minimum evaluation of "satisfactory" on all required work term reports. Consult the Co-op advisor or Department for additional information.

**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 - Fall**

MCS*1000	[0.50]	Introductory Marketing
MCS*1820	[0.50]	Real Estate and Housing
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1000	[0.50]	Introductory Calculus

0.50 electives

Note: Students who are exceptionally strong in mathematics may substitute either MATH\*1080 or MATH\*1200 for MATH\*1000.

**Semester 2 - Winter**

MCS*1400	[0.50]	Introduction to Design
ECON*1100	[0.50]	Introductory Macroeconomics
POLS*2300	[0.50]	Canadian Government

1.00 electives

**Semester 3 - Fall**

AGEC*2220	[0.50]	Financial Accounting
COOP*1100	[0.00]	Introduction to Co-operative Education
MCS*2020	[0.50]	Information Management
ECON*2310	[0.50]	Intermediate Microeconomics
STAT*2060	[0.50]	Statistics for Business Decisions

0.50 electives

**Semester 4 - Winter**

AGEC*2230	[0.50]	Management Accounting
MCS*2820	[0.50]	Real Estate Finance
ECON*2410	[0.50]	Intermediate Macroeconomics

1.00 electives

**Summer Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

MCS*2850	[0.50]	Service Learning in Housing
MCS*3820	[0.50]	Real Estate Development
MCS*3890	[0.50]	Property Management
ECON*3510	[0.50]	Money, Credit and the Financial System

0.50 electives

**Semester 6 - Fall**

MCS*3030	[0.50]	Research Methods
MCS*3810	[0.50]	Real Estate Market Analysis
MCS*4840	[0.50]	Housing and Real Estate Law *
ECON*3560	[0.50]	Theory of Finance

0.50 or 1.00 electives

\* This course is offered every other year; should be taken in Semester 6 or 7.

**Winter Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Summer Semester**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 7 - Fall**

AGEC*3320	[0.50]	Financial Management
MCS*4820	[0.50]	Real Estate Appraisal
ECON*3500	[0.50]	Urban Economics
HTM*4390	[0.50]	Individuals and Groups in Organizations

0.50 electives or MCS\*4840 if not taken in Semester 6

**Semester 8 - Winter**

MCS*4810	[0.50]	Real Estate and Housing Project
LARC*2820	[0.50]	Urban and Regional Planning
POLS*3270	[0.50]	Local Government in Ontario

1.00 electives

**Tourism Management (TMGT)****School of Hospitality and Tourism Management, College of Social and Applied Human Sciences**

As the world's largest industry, tourism encompasses a wide range of public and private enterprises that require knowledgeable and talented management professionals. The program in Tourism Management builds on a strong base of hospitality management courses (human resources management, accounting, finance, cost controls, hotel operations). In conjunction with these courses the program provides specialized courses dealing with the economic, social, cultural and environmental aspects of the industry as well as the critical functions of tourism marketing, distribution, planning and development. In addition, there are opportunities to develop expertise in eco-tourism and international tourism operations. Verified work experience in the hospitality and tourism industry is required for students to be eligible to graduate. Group work is a significant part of core

credit work. Students may consult the Faculty Advisor or the B.Comm. Program Counsellor for additional information.

For this major, 15.00 of the 20.00 credits are specified as core requirements, 2.50 as restricted electives (List A), and the remaining 2.50 as electives.

**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
GEOG*1220	[0.50]	Human Impact on the Environment
HTM*1000	[0.50]	Introduction to Hospitality and Tourism Management
POLS*1400	[0.50]	Issues in Canadian Politics
PSYC*1200	[0.50]	Dynamics of Behaviour

**Semester 2**

ECON*1100	[0.50]	Introductory Macroeconomics
HTM*2000	[0.50]	Hospitality and Tourism Purchasing Management
HTM*2010	[0.50]	Hospitality and Tourism Business Communications
HTM*2100	[0.50]	Lodging Operations
HTM*2120	[0.50]	Hospitality and Tourism Marketing I

**Semester 3**

AGEC*2220	[0.50]	Financial Accounting
MCS*2020	[0.50]	Information Management
HTM*2050	[0.50]	Dimensions of Tourism

1.00 from List A or electives

**Semester 4**

HTM*2030	[0.50]	Control Systems in the Hospitality and Tourism Industry
HTM*2170	[0.50]	Canadian Tourism Policy, Planning and Development
HTM*2200	[0.50]	Organizational Behaviour I
STAT*2060	[0.50]	Statistics for Business Decisions

0.50 from List A or electives

**Semester 5**

MCS*3040	[0.50]	Business and Consumer Law
HTM*3070	[0.50]	Hospitality and Tourism Management Accounting
HTM*3080	[0.50]	Hospitality and Tourism Marketing II
HTM*3160	[0.50]	Destination Management and Marketing

0.50 from List A or electives

**Semester 6**

AGEC*3320	[0.50]	Financial Management
AGEC*4360	[0.50]	Marketing Research
HTM*3000	[0.50]	Human Resources Management
HTM*3120	[0.50]	Operations Analysis in the Hospitality and Tourism Industry

0.50 from List A or electives

**Semester 7**

ECON*3460	[0.50]	Introduction to Finance
HTM*4100	[0.50]	Organizational Behaviour II
HTM*4190	[0.50]	Hospitality and Tourism Operations Planning

1.00 from List A or electives

**Semester 8**

HTM*4170	[0.50]	International Tourism Development and Management
HTM*4200	[0.50]	Policy Issues in Hospitality and Tourism Management

1.50 from List A or electives

**List A - Restricted Electives**

In addition to the 15.00 required credits, students must also take a minimum of 2.50 restricted elective credits from the following list, throughout the program. Students may choose to explore a variety of subjects or may choose to study an area related to their major in some depth. Restricted electives are listed below and have been grouped into major subject areas which are related to the professional interests of the Tourism Management major. Students may, however, choose restricted electives from any of those listed without regard to the categories. Students may also select up to 2.00 credits in language courses as restricted electives. Students without a second language are strongly recommended to take language courses.

*Courses related to eco-tourism:*

AGEC*2700	[0.50]	Survey of Natural Resource Economics
AGEC*4290	[0.50]	Land Economics
AGEC*4310	[0.50]	Resource Economics
ECON*2100	[0.50]	Economic Growth and Environmental Quality
GEOG*2210	[0.50]	Environment and Resources
GEOG*3490	[0.50]	Tourism and Environment
PHIL*2070	[0.50]	Philosophy of the Environment
POLS*3370	[0.50]	Environmental Policy Formation and Administration

*Courses related to international tourism:*

ECON*2650	[0.50]	Introductory Development Economics
ECON*3620	[0.50]	International Trade
ECON*4830	[0.50]	Economic Development
EDRD*3500	[0.50]	Recreation and Tourism Planning
EDRD*4010	[0.50]	Tourism Planning in the Less Developed World
GEOG*3490	[0.50]	Tourism and Environment
HTM*2740	[0.50]	Cultural Aspects of Food
REXT*3060	[0.50]	International Communication

*Courses for those interested in developing tourism related real estate:*

MCS*1820	[0.50]	Real Estate and Housing
MCS*2820	[0.50]	Real Estate Finance
MCS*3810	[0.50]	Real Estate Market Analysis
MCS*3820	[0.50]	Real Estate Development
MCS*3890	[0.50]	Property Management
MCS*4820	[0.50]	Real Estate Appraisal
MCS*4840	[0.50]	Housing and Real Estate Law
GEOG*3490	[0.50]	Tourism and Environment
LARC*2820	[0.50]	Urban and Regional Planning

*Courses dealing with the social and economic environment of business:*

ECON*2410	[0.50]	Intermediate Macroeconomics
PHIL*1010	[0.50]	Introductory Philosophy: Social and Political Issues
PHIL*2600	[0.50]	Business and Professional Ethics

*Courses dealing with human behaviour particularly as related to work and work groups:*

ANTH*1150	[0.50]	Introduction to Anthropology
ANTH*2160	[0.50]	Social Anthropology
ECON*2200	[0.50]	Industrial Relations
PSYC*2310	[0.50]	Introduction to Social Psychology
PSYC*3060	[0.50]	Occupational Health Psychology

*Courses dealing with marketing and consumer behaviour:*

AGEC*4370	[0.50]	Marketing Management
MCS*1000	[0.50]	Introductory Marketing
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
MCS*3600	[0.50]	Consumer Information Processes
MCS*3620	[0.50]	Marketing Communications
MCS*4050	[0.50]	The Evolution of Capitalism: A Canadian Perspective

*Courses related to Hospitality and Tourism Management:*

HTM*2070	[0.50]	Meetings and Convention Management
HTM*2700	[0.50]	Introductory Foods
HTM*2740	[0.50]	Cultural Aspects of Food
HTM*3030	[0.50]	Beverage Management
HTM*3060	[0.50]	Lodging Management
HTM*3090	[1.00]	Foodservice Operations Management
HTM*3180	[0.50]	Casino Operations Management
HTM*3200	[0.50]	Club Management Operations
HTM*3250	[0.50]	Tourism in Canada
HTM*3780	[0.50]	Economics of Food Usage
HTM*4050	[0.50]	Wine and Oenology
HTM*4090	[0.50]	Hospitality and Tourism Facilities Management and Design
HTM*4110	[0.50]	Restaurant Operations
HTM*4120	[0.50]	Entrepreneurship in Hospitality and Tourism
HTM*4130	[0.50]	Current Management Topics
HTM*4140	[0.50]	Current Management Topics
HTM*4150	[0.50]	Current Management Topics
HTM*4500	[0.50]	Special Study in Hospitality and Tourism

*Courses related to accounting and administration:*

AGEC*2230	[0.50]	Management Accounting
AGEC*3310	[0.50]	Operations Management
AGEC*3330	[0.50]	Intermediate Accounting
AGEC*4250	[0.50]	Business Policy
AGEC*4410	[0.50]	Sales and Sales Management
MCS*2100	[0.50]	Personal Financial Management

*Other restricted electives:*

CHEM*1100	[0.50]	Chemistry Today
CIS*1000	[0.50]	Introduction to Computer Applications
MCS*3010	[0.50]	Quality Management
ENGL*1410	[0.50]	Major English Writers
PHIL*2100	[0.50]	Critical Thinking
REXT*3040	[0.50]	Communication Process

**Electives and Liberal Education Requirement**

The 2.50 electives in the program must include 1.50 credits toward the B.Comm. Liberal Education Requirement.

## 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.

Guelph's Bachelor of Computing degree combines the necessary theoretical background with an applied focus to learning. Course projects which are based on real-world software development scenarios allow students to get the practical experience valued by today's high-tech employers. The focused study in a second discipline gives students the necessary background to effectively apply their knowledge.

For the degree of Bachelor of Computing the University of Guelph offers a specialized program requiring the equivalent of 8 semesters of successful full-time study (honours program) and a general program requiring the equivalent of 6 semesters of successful full-time study (general program). The honours program is also available as a Co-op degree.

A student may register in any of the 3 semesters (Summer, Fall, Winter). Since not all courses are offered in every semester and prerequisite dependencies must be observed, students are encouraged to consult the program counsellor for the B.Comp. program to plan an initial program of study or when considering modifications to the suggested schedule of studies list (below).

### Program Information

#### B.Comp. Program Regulations

The general program is designed to provide a sound general education in computing.

The honours program is designed to provide depth of study and specialization beyond that available in the general program, while at the same time ensuring a complementary background in an area of application.

#### 1. Requirements for a General Degree

To graduate from a general program a student must:

- 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.
- 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.
- successfully complete the following credits:
 

CIS*1500	[0.50]	Introduction to Programming
CIS*1910	[0.50]	Discrete Structures in Computing I
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
CIS*2910	[0.50]	Discrete Structures in Computing II
CIS*3530	[0.50]	Data Base Systems and Concepts

0.5 additional C.I.S. or STAT credits at the 2000 level or higher  
1.0 additional C.I.S. credits at 3000 level or higher
- 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.

#### 2. Requirements for an Honours Degree

To graduate from an honours program a student must:

- successfully complete 20.00 credits. These must include the 11.75 credits that fulfill the Computing Core Requirements (below), a minimum of 4.00 credits in an Area of Application (below) and an additional 4.25 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 credits at the 3000 level or above and 2.00 credits at the 4000 level, while 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.

- complete the following Computing Core Requirements:

CIS*1500	[0.50]	Introduction to Programming
CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2460	[0.50]	Modelling of Computer Systems
CIS*2500	[0.50]	Intermediate Programming
CIS*2520	[0.50]	Data Structures
CIS*2750	[0.75]	Software Systems Development and Integration
CIS*2910	[0.50]	Discrete Structures in Computing II
CIS*3110	[0.50]	Operating Systems
CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
CIS*3530	[0.50]	Data Base Systems and Concepts

CIS*3750	[0.75]	System Analysis and Design in Applications
CIS*4000	[0.50]	Applications of Computing Seminar
MATH*1200	[0.50]	Calculus I
STAT*2040	[0.50]	Statistics I

1.75 additional C.I.S. credits at the 3000 level or above

1.50 additional C.I.S. credits at the 4000 level or above

- obtain a cumulative average at least 70% in CIS courses. Students who do not satisfy this requirement at graduation may apply for a General Degree.
- earn at least 4.00 credits in an Area of Application with at least 1.00 credits at the 3000 level or above. These credits must be taken from a single department or subject other than Computing and Information Science.

An area of Application normally consists of 4.00 credits (normally 8 courses) of a minor. Minors in the B.A. program and B.Sc. Minors are listed in Section X of the Calendar. A student may complete a minor should they decide to do so.

Students must consult the faculty advisor for approval of their Area of Application in semester 4.

Some courses may have enrolment restrictions placed on them.

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.

#### 3. 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.

#### Schedule of Studies

Since many courses are offered in only one semester and course prerequisites 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. This schedule assumes a Fall/Winter semester sequence.

#### Major (Honours Program)

##### School of Computing and Information Science, College of Physical and Engineering Science

##### Semester 1

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I

1.50 credits in the Area of Application or electives

##### Semester 2

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming

1.50 credits in the Area of Application or electives

##### Semester 3

CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2520	[0.50]	Data Structures
CIS*2910	[0.50]	Discrete Structures in Computing II

0.50 credits in the Area of Application or electives

##### Semester 4

CIS*2750	[0.75]	Software Systems Development and Integration
CIS*3110	[0.50]	Operating Systems
CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
STAT*2040	[0.50]	Statistics I

0.25 credits in the Area of Application or elective

##### Semester 5

CIS*2460	[0.50]	Modelling of Computer Systems
CIS*3530	[0.50]	Data Base Systems and Concepts
CIS*3750	[0.75]	System Analysis and Design in Applications

0.75 credits in the Area of Application or electives

##### Semester 6

Alternative 1 [Recommended]

CIS*3760	[0.75]	Software Engineering
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0.50 C.I.S. electives at the 3000 level or above

1.25 credits in the Area of Application or electives

OR Alternative 2

(1.50 C.I.S. electives at the 3000 level or above

1.00 credits in the Area of Application or electives)

##### Semester 7

1.00 credits in the Area of Application or electives

0.50 credits in C.I.S. at 3000 level or above

1.00 credits in C.I.S. at the 4000 level

##### Semester 8

CIS*4000	[0.50]	Applications of Computing Seminar
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1.50 credits in the Area of Application or electives

0.50 credits in C.I.S. at the 4000 level

### Schedule of Studies Co-op

Since many courses are offered in only one semester and course prerequisites 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 Co-op faculty advisor. This schedule assumes a Fall/Winter semester sequence.

### Major Co-op (Honours Program)

#### School of Computing and Information Science, College of Physical and Engineering Science

The Honours Bachelor of Computing degree is also available as a Co-operative Education Program. Students may apply for this option at the time of University admission or completion of semester 2. Three co-op work terms are required in Stream A and four are required in Stream B. Please check with CIS. Co-op faculty advisor for semester planning.

The course COOP\*1100 must be successfully completed before the student may apply for a placement for the first work term (normally 2 semesters before the first work term).

Other sequences may not be viable for the co-op student. Please check with the CIS Co-op faculty advisor for semester planning. COOP\*1000, COOP\*2000, COOP\*3000, and COOP\*4000 represent the first, second, third, and fourth work terms respectively.

**Conditions for graduation are the same as the corresponding regular B.Comp. Program. In addition, all work reports and performance evaluations must have a grade of satisfactory or better.**

#### Work/Study Semesters

#### Stream A Co-Op Schedule of Studies

##### Semester 1(Fall)

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I

1.50 credits in the Area of Application or electives

##### Semester 2(Winter)

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education

1.50 credits in the Area of Application or electives

##### Semester 3(Summer)

CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2520	[0.50]	Data Structures
CIS*2910	[0.50]	Discrete Structures in Computing II

0.50 credits in the Area of Application or electives

##### Fall Semester

COOP\*1000 Work Term 1

##### Semester 4(Winter)

CIS*2750	[0.75]	Software Systems Development and Integration
CIS*3110	[0.50]	Operating Systems
CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
STAT*2040	[0.50]	Statistics I

0.25 credits in the Area of Application or electives

##### Summer Semester

COOP\*2000 Work Term 2

##### Semester 5(Fall)

CIS*2460	[0.50]	Modelling of Computer Systems
CIS*3530	[0.50]	Data Base Systems and Concepts
CIS*3750	[0.75]	System Analysis and Design in Applications

0.75 credits in the Area of Application or electives

##### Winter Semester

COOP\*3000 Work Term 3

##### Semester 6(Summer)

Alternative 1 [Recommended]

CIS*3760	[0.75]	Software Engineering
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0.50 C.I.S. electives at the 3000 level or above

1.25 credits in the Area of Application or electives

OR Alternative 2

(1.50 C.I.S. electives at the 3000 level or above

1.00 credits in the Area of Application or electives)

##### Semester 7(Fall)

1.00 credits in the Area of Application or electives

0.50 credits in C.I.S. at 3000 level or above

1.00 credits in C.I.S. at the 4000 level

##### Semester 8(Winter)

CIS*4000	[0.50]	Applications of Computing Seminar
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1.50 credits in the Area of Application or electives

0.50 credits in C.I.S. at the 4000 level

### The recommended schedule of studies for Co-op Stream B is as follows:

#### Semester 1(Fall)

CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I

1.50 credits in the Area of Application or electives

#### Semester 2(Winter)

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education

1.50 credits in the Area of Application or electives

#### Summer Semester Off

#### Semester 3(Fall)

CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2430	[0.50]	Object Oriented Programming
CIS*2520	[0.50]	Data Structures
CIS*2910	[0.50]	Discrete Structures in Computing II

0.50 credits in the Area of Application or electives

#### Semester 4(Winter)

CIS*2750	[0.75]	Software Systems Development and Integration
CIS*3110	[0.50]	Operating Systems
CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
STAT*2040	[0.50]	Statistics I

0.25 credits in the Area of Application or elective

#### Summer Semester

COOP\*1000 Work Term 1

#### Semester 5(Fall)

CIS*2460	[0.50]	Modelling of Computer Systems
CIS*3530	[0.50]	Data Base Systems and Concepts
CIS*3750	[0.75]	System Analysis and Design in Applications

0.75 credits in the Area of Application or electives

Note: CIS\*3210 should be taken here to enable future courses in distributed computing.

#### Winter Semester

COOP\*2000 Work Term 2

#### Semester 6(Summer)

Alternative 1 [Recommended]

CIS*3760	[0.75]	Software Engineering
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0.50 C.I.S. electives at the 3000 level or above

1.25 credits in the Area of Application or electives

OR Alternative 2

(1.50 C.I.S. electives at the 3000 level or above

1.00 credits in the Area of Application or electives)

#### Fall Semester

COOP\*3000 Work Term 3

#### Semester 7(Winter)

1.00 credits in the Area of Application or electives

0.50 credits in C.I.S. at 3000 level or above

1.00 credits in C.I.S. at the 4000 level

#### Summer Semester

COOP\*4000 Work Term 4

#### Semester 8(Fall)

CIS*4000	[0.50]	Applications of Computing Seminar
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1.50 credits in the Area of Application or electives

0.50 credits in C.I.S. at the 4000 level

## Bachelor 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

In education and practice landscape architecture involves both planning and design. Its unique responsibility is to integrate societal needs with the natural environment in a manner which is non-polluting and results in minimal alteration to natural ecosystems. Frequently the landscape architect must work closely with architects, urban planners and engineers, and where the conservation and creation of natural settings is concerned they must work with scientists in this field. The challenge confronting the professional landscape architect is significant and promises to become even greater in the future.

Persons interested in pursuing a career in Landscape Architecture should possess several basic qualities. It is essential that the prospective student have a keen interest in art and design which may be cultivated to professional competence. They should have a strong interest in nature, a love of plants and a desire to arrange landscapes into beautiful and functional forms. Lastly, they should possess a strong interest in people as the art of landscape architecture is directed toward creating landscapes which fulfill people's requirements for use and enjoyment.

The program in Landscape Architecture prepares the prospective graduate for a wide variety of career opportunities in private practice or in public agencies at the municipal, provincial and national levels. The undergraduate training is a sound basis for graduate study in landscape architecture, urban and regional planning and resource development.

#### Accreditation

The baccalaureate degree program in Landscape Architecture is recognized by the Canadian Society of Landscape Architects and the American Society of Landscape Architects. The program is fully accredited by the Landscape Architectural Accreditation Board (L.A.A.B.) for the Canadian Society of Landscape Architects (C.S.L.A.), and this accreditation is recognized by the American Society of Landscape Architects (A.S.L.A.). Graduates are entitled to apply for registration as a Landscape Architect within the Province of Ontario after completing 2 years of acceptable experience as a Landscape Architectural Associate member of the Ontario Association of Landscape Architects and successful completion of 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 departmental advisor 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 their departmental advisor. A substitute course will normally be in the same academic area as that listed in the Landscape Architecture Program.

The following elective courses in Landscape Architecture are available. Refer to course descriptions for scheduling information.

LARC*3500	[0.50]	Independent Study
LARC*4520	[0.50]	Park and Recreation Administration
LARC*4730	[0.50]	Special Study in Landscape Architecture
LARC*4740	[0.50]	Case Studies

#### 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).

#### Schedule of Studies

##### Major (Honours Program)

##### Semester 1

BIOL*1030	[0.50]	Biology I
ENGL*1200	[0.50]	Reading the Contemporary World
LARC*1100	[0.75]	Design and Communications Studio
LARC*1950	[0.50]	History of Cultural Form I
One of:		
ANTH*1150	[0.50]	Introduction to Anthropology
PHIL*1010	[0.50]	Introductory Philosophy: Social and Political Issues
PSYC*1100	[0.50]	Principles of Behaviour
SOC*1100	[0.50]	Sociology

##### Semester 2

LARC*2020	[0.75]	Design Studio
LARC*2330	[0.25]	Planting Design I
LARC*2420	[0.50]	Materials and Techniques
PHIL*2070	[0.50]	Philosophy of the Environment

One of:

0.50 Studio Arts electives (2000 level)\*

0.50 Social Science electives\*

\*One of either this semester (the alternate selection must be taken in Semester 4, therefore obtaining one Studio Arts electives and one Social Science electives over these two semesters). Note: "Social Science" is defined as Anthropology, Economics, Geography, International Development, Political Science, Psychology or Sociology.

##### Semester 3

HORT*3260	[0.50]	Woody Plants
LARC*2100	[0.50]	Landscape Analysis
LARC*2340	[0.25]	Planting Design II
LARC*2410	[0.50]	Site Engineering
LARC*3040	[0.75]	Site Planning and Design Studio

##### Semester 4

LARC*2820	[0.50]	Urban and Regional Planning
LARC*3050	[0.75]	Landscape Architecture I
LARC*3430	[0.50]	Landscape Construction I

One of:

0.50 Studio Arts electives (2000 level)\*

0.50 Social Sciences electives\*

0.50 electives

\*One of either this semester (the alternate selection must be taken in Semester 2, therefore obtaining one Studio Arts electives and one Social Science electives over these two semesters). Note: "Social Science" is defined as Anthropology, Economics, Geography, International Development, Political Science, Psychology or Sociology.

##### Semester 5

ENVS*3320	[0.50]	Principles of Landscape Ecology **
LARC*3060	[0.75]	Landscape Architecture II
LARC*3440	[0.75]	Landscape Construction II
LARC*4610	[0.50]	Professional Practice

0.50 electives (in odd years)

\*\* is offered in even-numbered years; to alternate with electives in odd years

##### Semester 6

Choose one of the following three options:

##### Option 1

2.00 - 2.50 electives

**Option 2**

LARC\*4620 [1.00] Internship in Landscape Architecture

1.00 electives

**Option 3**

Exchange Program (2.00 - 2.50 credits)

**Semester 7**

ENVS\*3320 [0.50] Principles of Landscape Ecology \*\*

LARC\*3070 [1.00] Landscape Architecture III

LARC\*4101 [0.50] Design Thesis

0.50 electives (in odd years)

\*\* is offered in even-numbered years; to alternate with electives in odd years

**Semester 8**

LARC\*4090 [0.50] Seminar

LARC\*4102 [1.00] Design Thesis

0.50 electives

0.50 electives (if needed)

## Bachelor of Science (B.Sc.)

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 advanced 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

### General Program Requirements

The general B.Sc. degree requires the successful completion of 15.00 required 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 1.50 credits (usually 3 courses) in each of the above areas. The courses to be taken in semesters 4 to 6 may be selected to allow a broad study of the sciences.

### Honours Program Requirements

In order to graduate in 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)

#### Honours Major

These programs 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) particularly 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 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 should seek advice from the program counsellor of either the College of Biological Science or the College of Physical and Engineering Science dependent upon their primary area(s) of interest. Refer to B.Sc. Program Requirements: Regulation 6. Double-Counting of Credits.

## B.Sc. Program Requirements

**Regulations 1, 2, 3 and 4 apply to all B.Sc. students.**

### 1. Entry Credits

In general, the 4U or OAC 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  
PHYS\*1020 for students lacking physics

Not more than one of the above will be allowed for credit toward the B.Sc. degree.

### 2. Basic Science Core

In each of the first 2 semesters B.Sc. students must take one (1) of the specified courses in each of biology, chemistry, physics and mathematical science, and 1 other course which is normally an Arts or Social Science elective.

### 3. 1000 Level Credits

No B.Sc. program may include more than 7.00 credits at the 1000 level.

### 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 (usually 28 courses) with the approval of the program counsellors. Acceptable science courses in the following programs means "acceptable to the B.Sc. Program Committee". Lists of acceptable courses are available in the offices of the faculty advisors and the program counsellors and on the world wide web at the following address: [http://www.bsc.uoguelph.ca/Approved\\_electives.shtml](http://www.bsc.uoguelph.ca/Approved_electives.shtml).

### 6. Double-Counting of Credits

A maximum of 2.00 credits required in a major program may be applied to meet the requirements of a minor program.

### 7. Continuation of Study

Students are advised to consult the regulations for continuation of study outlined in detail in Section VIII--Undergraduate Degree Regulations & Procedures.

## 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 (usually 30 courses) as outlined in the Total Course Requirements for all students in the General Science Program.

## Recommended Schedule for Students in Biological Science Areas

### Semester 1\*

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II

One of:

MATH*2080	[0.50]	Elements of Calculus II
STAT*2040	[0.50]	Statistics I

One of:

PHYS*1080	[0.50]	Physics for Life Sciences
PHYS*2040	[0.50]	Fundamental Electronics and Sensors

0.50 electives

### Semester 3

0.50 credits in biological science

0.50 credits in chemistry  
 0.50 credits in physics  
 0.50 credits in mathematical science  
 0.50 electives

#### Semester 4 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'.

\*refer to B.Sc. Program Requirements: Regulation 1, Entry Credits and Regulation 3, 1000 Level Credits

### Recommended Schedule for Students in Physical Science Areas

#### Semester 1\*

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

0.50 Arts or Social Science electives

#### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 electives

#### Semester 3

One of:

CIS*1200	[0.50]	Introduction to Computing
STAT*2040	[0.50]	Statistics I
STAT*2100	[0.50]	Introductory Probability and Statistics

0.50 credits in biological science

0.50 credits in chemistry

0.50 credits in physics

0.50 electives

#### Semester 4 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'.

\*refer to B.Sc. Program Requirements: Regulation 3, 1000 Level Credits

### Total Course Requirements for all Students in the General Science Program

Total of 15.00 credits (usually 30 courses) as follows:

1. The Science core - a minimum of 1.50 credits (usually 3 courses) beyond the 4U or OAC level, in each of biological science, chemistry, mathematical science, physics (Refer to "Regulation 3, 1000 Level Credits") - minimum of 6.00 (usually 12 courses)
2. Additional acceptable science credits\* - selected from biological science, chemistry, computing and information science, mathematics, statistics, physics, geology or other science courses - 6.00 credits (usually 12 courses)
3. Arts and social science credits - 2.00 credits (usually 4 courses)
4. Additional acceptable credits (these may include one of BIOL\*1020, CHEM\*1060, PHYS\*1020) - 1.00 credits (usually 2 courses)

\*at least 2.00 credits (usually 4 courses) of the additional science courses must be 3000 or 4000 level

### Honours Programs (BSCH)

#### Honours Program Majors

The following honours majors are available:

##### Biological Sciences:

20.00 credits - Animal Biology  
 20.25 credits - Biochemistry  
 20.00 credits - Biological Science  
 20.00 credits - Bio-Medical Science  
 20.00 credits - Human Kinetics  
 20.00 credits - Marine and Freshwater Biology  
 20.00 credits - Microbiology  
 20.00 credits - Molecular Biology & Genetics  
 20.00 credits - Nutritional and Nutraceutical Sciences  
 20.00 credits - Plant Biology  
 20.00 credits - Plant Biotechnology  
 20.00 credits - Wild Life Biology  
 20.00 credits - Zoology

##### Physical Sciences:

20.00 credits - Biological Chemistry  
 21.25 credits - Biophysics  
 21.75 credits - Chemical Physics  
 20.25 credits - Chemistry

20.00 credits - Physical Science

21.25 credits - Physics

21.25 credits - Theoretical Physics

##### Environmental Sciences:

20.25 credits - Biomedical Toxicology  
 20.00 credits - Earth Surface Science\*  
 20.00 credits - Ecology\*  
 20.00 credits - Environmental Biology\*  
 20.00 credits - Environmental Toxicology

\*also see B.SC.(ENV.)

##### Computing Science, Mathematics, Statistics

20.00 credits - Computing & Information Science  
 20.00 credits - Mathematics  
 20.00 credits - Statistics

##### Additional Disciplines:

20.00 credits - Food Science  
 20.00 credits - Psychology

##### Co-operative Educational Programs:

20.00 credits - Applied Mathematics and Statistics  
 20.25 credits - Biochemistry  
 20.25 credits - Biomedical Toxicology  
 21.25 credits - Biophysics  
 21.25 credits - Chemical Physics  
 20.25 credits - Chemistry  
 20.00 credits - Computing & Information Science  
 20.00 credits - Environmental Toxicology  
 20.00 credits - Food Science  
 20.00 credits - Microbiology  
 21.25 credits - Physics

### 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  
 5.00 credits - Biochemistry  
 5.00 credits - Biotechnology  
 5.00 credits - Functional Foods and Nutraceuticals  
 5.00 credits - Microbiology  
 5.00 credits - Molecular Biology and Genetics  
 5.00 credits - Neuroscience  
 5.00 credits - Nutritional Sciences  
 5.00 credits - Plant Biology  
 5.00 credits - Plant Biotechnology  
 5.00 credits - Zoology

##### Physical Sciences:

5.00 credits - Chemistry  
 5.00 credits - Physics

##### Environmental Sciences:

5.00 credits - Ecology  
 5.00 credits - Forest Science  
 5.00 credits - Geographic Info. Sys. (G.I.S.) and Environmental Analysis  
 5.00 credits - Geology

##### Mathematical Sciences:

5.25 credits - Computing & Information Science  
 5.00 credits - Mathematical Science  
 5.00 credits - Mathematics  
 5.00 credits - Statistics

##### Additional Disciplines:

5.00 credits - Business Administration  
 5.00 credits - Food Science  
 5.00 credits - Psychology

### Continuation of Study

Students are advised to consult the regulations for continuation of study within the program which are outlined in detail in Section VII--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 2. Application forms can be obtained from the appropriate faculty co-op advisor. In-course students will need to complete successfully an interview in the appropriate department. Students must be either a Canadian Citizen or Permanent Resident. A cumulative average of 70% is required in courses taken in Semesters 1 and 2 to permit continuation in the program.

### 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 and Poultry 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 must consult the Faculty Advisor.

#### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

One of:

CIS*1000	[0.50]	Introduction to Computer Applications
CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

0.50 Arts or Social Science electives

#### Semester 3

AGR*2350	[0.50]	Animal Production Systems and Industry
BIOC*2580	[0.50]	Introductory Biochemistry
BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2000	[0.50]	Introductory Genetics

0.50 Arts or Social Science electives

#### Semester 4

ANSC*2340	[0.50]	Structure of Farm Animals
MBG*2020	[0.50]	Introductory Molecular Biology
NUTR*3210	[0.50]	Fundamentals of Nutrition
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science 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*3150	[0.50]	Principles of Farm Animal Care and Welfare
ANSC*3300	[0.50]	Animal Reproduction
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

Students must complete 2.00 credits from Arts or Social Science courses.

0.50 credits is required from each of the following: Nutrition, Breeding and Genetics, and Physiology. Students are encouraged to consult with the Faculty Advisor for help in tailoring their selection to meet personal and career interests.

**Note:** Students are required to complete 16.00 credits in science of which a minimum of 6.00 credits must be at the 3000, 4000 level and at least 2.00 credits of these must be 4000 level.

#### 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*4550	[0.50]	Horse Nutrition
ANSC*4560	[0.50]	Pet Nutrition

#### Breeding & Genetics [0.50] Required

ANSC*4050	[0.50]	Biotechnology in Animal Science
MBG*3090	[0.50]	Applied Animal Breeding
MBG*4030	[0.50]	Animal Breeding Methods

#### Physiology [0.50] Required

ANSC*4090	[0.50]	Applied Animal Behaviour
ANSC*4100	[0.50]	Environmental Management and Animal Productivity
ANSC*4130	[0.50]	Reproductive Management and Technology
ANSC*4350	[0.50]	Experiments in Animal Biology
ANSC*4470	[0.50]	Animal Metabolism
ANSC*4490	[0.50]	Applied Endocrinology

An additional 3.00 credits must be obtained by selecting courses from the above lists and from the following:

AGR*2360	[0.50]	Challenges & Opportunities in Animal Production
ANSC*4610	[0.50]	Critical Analysis in Animal Science
ANSC*4650	[0.50]	Immune Mechanisms of Animals
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
MICR*3230	[0.50]	Immunology I
MICR*4230	[0.50]	Immunology II
PATH*3610	[0.50]	Principles of Disease
POPM*3240	[0.50]	Epidemiology
POPM*4230	[0.50]	Animal Health

## Applied Mathematics and Statistics (Co-op) (APMS:C)

### Department of Mathematics and Statistics, College of Physical and Engineering Science

#### Major (Honours Program)

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 this program which includes 4.50 credits in Mathematics, 2.50 credits in Statistics, 2.50 credits in Mathematics or Statistics at the 3000 level, and an additional 2.00 credits in Mathematics or Statistics at the 4000 level, 1.00 credits in Computing and Information Science, and 1.00 credits in Arts or Social Sciences courses.

#### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

#### Summer Semester

No study semester or work term.

#### Semester 3 - Fall

MATH*2000	[0.50]	Set Theory
MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science electives

#### Winter Semester

COOP*1000	[0.00]	Co-op Work Term I
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Note: Suggested course sequences are available in the departmental brochure. Please consult with the departmental advisor.

#### Semester 4 - Summer

MATH*2130	[0.50]	Numerical Methods
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MATH\*2170 [0.50] Differential Equations I

STAT\*2050 [0.50] Statistics II

0.50 Arts or Social Science electives

0.50 electives

### Fall Semester

COOP\*2000 [0.00] Co-op Work Term II

### Semester 5 - Winter

1.00 credits in Mathematics or Statistics at the 3000 level or above

1.50 electives

### Summer Semester

COOP\*3000 [0.00] Co-op Work Term III

### Semester 6 - Fall

STAT\*3100 [0.50] Introductory Mathematical Statistics I

STAT\*3240 [0.50] Applied Regression Analysis

At least 1.00 credits from:

MATH\*3100 [0.50] Differential Equations II

MATH\*3200 [0.50] Real Analysis

MATH\*3240 [0.50] Operations Research

0.50 electives

### Semester 7 - Winter

STAT\*3110 [0.50] Introductory Mathematical Statistics II

1.50 credits in Mathematics or Statistics at the 3000 level or above

0.50 electives

### Summer Semester

COOP\*4000 [0.00] Co-op Work Term IV

### Semester 8 - Fall

2.00 credits in Mathematics or Statistics at the 4000 level

0.50 electives

### Electives must include:

1.00 credits in Arts and Social Science courses

2.50 credits in Mathematics or Statistics at the 3000 level

2.00 credits in Mathematics or Statistics at the 4000 level

## Biochemistry (BIOC)

### Department of Molecular and Cellular Biology, College of Biological Science

### Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. The major will require the completion of at least 20.25 credits as indicated below:

### Semester 1

BIOL\*1030 [0.50] Biology I

CHEM\*1040 [0.50] General Chemistry I

MATH\*1200 [0.50] Calculus I

PHYS\*1000 [0.50] An Introduction to Mechanics

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

### Semester 2

BIOL\*1040 [0.50] Biology II

CHEM\*1050 [0.50] General Chemistry II

CIS\*1500 [0.50] Introduction to Programming

MATH\*1210 [0.50] Calculus II

PHYS\*1010 [0.50] Introductory Electricity and Magnetism

### Semester 3

BIOC\*2580 [0.50] Introductory Biochemistry

CHEM\*2060 [0.50] Structure and Bonding

CHEM\*2480 [0.50] Analytical Chemistry I

CHEM\*2880 [0.50] Physical Chemistry

MBG\*2000 [0.50] Introductory Genetics

### Semester 4

BIOC\*3560 [0.50] Structure and Function in Biochemistry

BIOL\*2210 [0.50] Introductory Cell Biology

CHEM\*2700 [0.50] Organic Chemistry I

MBG\*2020 [0.50] Introductory Molecular Biology

0.50 electives

### Semester 5

BIOC\*3570 [0.50] Analytical Biochemistry

CHEM\*3750 [0.50] Organic Chemistry II

MICR\*2030 [0.50] Microbial Growth

STAT\*2040 [0.50] Statistics I

0.50 electives

### Semester 6

MBG\*3350 [0.75] Laboratory Methods in Molecular Biology I

PHYS\*2030 [0.50] Biophysics of Excitable Cells

1.50 electives

### Semester 7

BIOC\*4520 [0.50] Metabolic Processes

MCB\*4080 [0.50] Applied Microbiology and Biochemistry

MICR\*3230 [0.50] Immunology I

One of:

MBG\*3070 [0.50] Bacterial Genetics

MBG\*3080 [0.50] Bacterial Genetics

MBG\*4080 [0.50] Molecular Genetics

0.50 electives

### Semester 8

BIOC\*4540 [0.50] Enzymology

BIOC\*4580 [0.50] Membrane Biochemistry

1.50 electives

### Electives

Selection of electives for the program is subject to the following rules:

1. At least 1.00 credits must be in the Arts and Social Sciences.
2. One of: MCB\*4050, TOX\*4590.
3. One of: BIOM\*3100, MICR\*4230, PBIO\*3110, PBIO\*4750.

## 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 [0.50] Analytical Biochemistry

BIOC\*4540 [0.50] Enzymology

CHEM\*2480 [0.50] Analytical Chemistry I

CHEM\*2700 [0.50] Organic Chemistry I

One of:

MBG\*2020 [0.50] Introductory Molecular Biology

MICR\*2030 [0.50] Microbial Growth

In addition, at least 2.00 credits must be chosen from the following courses, with at least 1.00 credits from the first four courses listed:

BIOC\*4520 [0.50] Metabolic Processes

BIOC\*4580 [0.50] Membrane Biochemistry

MBG\*3350 [0.75] Laboratory Methods in Molecular Biology I

MCB\*4080 [0.50] Applied Microbiology and Biochemistry

MICR\*3230 [0.50] Immunology I

TOX\*4590 [0.50] Biochemical Toxicology

## Biochemistry (Co-op) (BIOC:C)

### Department of Molecular and Cellular Biology, College of Biological Science

Two Streams are available. Stream A is different from Stream B in that Stream A has a double work term following academic semester 5. The course content of semesters 1-4 is the same as that listed above for the regular Honours Program Major. Students in the Co-op program must also take COOP\*1100 in the second academic semester. The total program requirements, including the selection of electives are also the same.

Students will be expected to undertake their work terms after semester 3 and completion of course CHEM\*2480. Since certain courses must be taken in a different semester from usual, consult your Faculty Co-op Advisor for assistance with course selection.

To graduate from the Co-op program a minimum of 4 successfully completed work terms is normally required.

## Stream A

### Semester 1 - Fall

BIOL\*1030 [0.50] Biology I

CHEM\*1040 [0.50] General Chemistry I

MATH\*1200 [0.50] Calculus I

PHYS\*1000 [0.50] An Introduction to Mechanics

0.50 Arts or Social Science electives

### Semester 2 - Winter

BIOL\*1040 [0.50] Biology II

CHEM\*1050 [0.50] General Chemistry II

CIS\*1500 [0.50] Introduction to Programming

COOP\*1100 [0.00] Introduction to Co-operative Education

MATH\*1210 [0.50] Calculus II

PHYS\*1010 [0.50] Introductory Electricity and Magnetism

### Summer Semester

No academic semester or work term

### Semester 3 - Fall

BIOC\*2580 [0.50] Introductory Biochemistry

CHEM*2060	[0.50]	Structure and Bonding
CHEM*2480	[0.50]	Analytical Chemistry I
CHEM*2880	[0.50]	Physical Chemistry
MBG*2000	[0.50]	Introductory Genetics

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOC*3570	[0.50]	Analytical Biochemistry
CHEM*2700	[0.50]	Organic Chemistry I
MBG*2020	[0.50]	Introductory Molecular Biology
STAT*2040	[0.50]	Statistics I

0.50 electives

**Semester 5 - Fall**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
BIOL*2210	[0.50]	Introductory Cell Biology
CHEM*3750	[0.50]	Organic Chemistry II
MICR*2030	[0.50]	Microbial Growth

0.50 electives

**Winter Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

MICR*3230	[0.50]	Immunology I
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One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics
MBG*4080	[0.50]	Molecular Genetics

1.50 electives

**Semester 7 - Winter**

BIOC*4540	[0.50]	Enzymology
BIOC*4580	[0.50]	Membrane Biochemistry
MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
PHYS*2030	[0.50]	Biophysics of Excitable Cells

0.50 electives

**Summer Semester**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 8 - Fall**

BIOC*4520	[0.50]	Metabolic Processes
MCB*4080	[0.50]	Applied Microbiology and Biochemistry

1.50 electives

**Electives**

Selection of electives for the program is subject to the following rules:

1. At least 1.00 credits must be in the Arts and Social Sciences.
2. One of: MCB\*4050, TOX\*4590.
3. One of: BIOM\*3100, MICR\*4230, PBIO\*3110, PBIO\*4750.

**Stream B****Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

0.50 Arts or Social Science electives

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
CIS*1500	[0.50]	Introduction to Programming
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

**Summer Semester**

No academic semester or work term

**Semester 3 - Fall**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2060	[0.50]	Structure and Bonding
CHEM*2480	[0.50]	Analytical Chemistry I
CHEM*2880	[0.50]	Physical Chemistry
MBG*2000	[0.50]	Introductory Genetics

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOC*3570	[0.50]	Analytical Biochemistry
CHEM*2700	[0.50]	Organic Chemistry I
MBG*2020	[0.50]	Introductory Molecular Biology
STAT*2040	[0.50]	Statistics I

0.50 elective

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
BIOL*2210	[0.50]	Introductory Cell Biology
MICR*2030	[0.50]	Microbial Growth
PHYS*2030	[0.50]	Biophysics of Excitable Cells

0.50 electives

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

CHEM*3750	[0.50]	Organic Chemistry II
MICR*3230	[0.50]	Immunology I

One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics
MBG*4080	[0.50]	Molecular Genetics

1.00 electives

**Semester 7 - Winter**

BIOC*4540	[0.50]	Enzymology
BIOC*4580	[0.50]	Membrane Biochemistry
MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I

1.00 electives

**Summer Semester**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 8 - Fall**

BIOC*4520	[0.50]	Metabolic Processes
MCB*4080	[0.50]	Applied Microbiology and Biochemistry

1.50 electives

**Electives**

Selection of electives for the program is subject to the following rules:

1. At least 1.00 credits must be in the Arts and Social Sciences.
2. One of: MCB\*4050, TOX\*4590.
3. One of: BIOM\*3100, MICR\*4230, PBIO\*3110, PBIO\*4750.

**Biological Chemistry (BCHM)****Department of Chemistry, College of Physical and Engineering Science****Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. This major will require the completion of 20.00 credits as indicated below:

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 Arts or Social Science electives

**Semester 3**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2060	[0.50]	Structure and Bonding
CHEM*2400	[0.75]	Analytical Chemistry I
MBG*2000	[0.50]	Introductory Genetics

0.50 electives or restricted electives \*

**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

MBG\*2020 [0.50] Introductory Molecular Biology  
0.50 electives or restricted electives \*

**Semester 5**

BIOC\*3570 [0.50] Analytical Biochemistry  
CHEM\*2880 [0.50] Physical Chemistry  
CHEM\*3640 [0.50] Chemistry of the Elements I  
CHEM\*3750 [0.50] Organic Chemistry II  
0.50 electives or restricted electives \*

**Semester 6**

BIOC\*3560 [0.50] Structure and Function in Biochemistry  
CHEM\*3650 [0.50] Chemistry of the Elements II  
CHEM\*3760 [0.50] Organic Chemistry III  
One of: \*\*  
CHEM\*4630 [0.50] Bioinorganic Chemistry  
CHEM\*4720 [0.50] Organic Reactivity

0.50 electives or restricted electives \*

**Semester 7**

CHEM\*4730 [0.50] Synthetic Organic Chemistry  
1.00 Chemistry, Biochemistry or Molecular Biology and Genetics courses at the 3000 or 4000 level \*\*\*

0.75 electives or restricted electives \*

**Semester 8**

CHEM\*4740 [0.50] Topics in Bio-Organic Chemistry  
One of: \*\*  
CHEM\*4630 [0.50] Bioinorganic Chemistry  
CHEM\*4720 [0.50] Organic Reactivity

0.50 Chemistry, Biochemistry or Molecular Biology and Genetics course at the 3000 or 4000 level \*\*\*

1.00 electives or restricted electives \*

\* restricted electives required include:

BIOL\*2210 [0.50] Introductory Cell Biology  
One of:  
MICR\*2020 [0.50] Microbial Interactions and Associations  
MICR\*2030 [0.50] Microbial Growth

\*\* CHEM\*4630 and CHEM\*4720 are offered in alternating winter semesters and both courses are required.

\*\*\* the allowable Chemistry, Biochemistry and Molecular Biology and Genetics courses at the 3000 and 4000 level are:

BIOC\*4520 [0.50] Metabolic Processes  
BIOC\*4540 [0.50] Enzymology  
BIOC\*4550 [0.50] Biochemistry and Structure of Macromolecules  
BIOC\*4570 [0.50] Applied Biochemistry  
BIOC\*4580 [0.50] Membrane Biochemistry  
CHEM\*3440 [0.50] Analytical Chemistry III: Analytical Instrumentation  
CHEM\*4900 [0.75] Chemistry and Biochemistry Research Project I  
CHEM\*4910 [0.75] Chemistry and Biochemistry Research Project II  
MBG\*3350 [0.75] Laboratory Methods in Molecular Biology I  
MBG\*4080 [0.50] Molecular Genetics  
TOX\*4590 [0.50] Biochemical Toxicology

**Biological Science (BIOS)**

**College of Biological Science**

**Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. This major will require the completion of 20.00 credits as indicated below:

1. First year Core - 4.00 credits
  - 1.00 - Biology BIOL\*1030 BIOL\*1040
  - 1.00 - Chemistry CHEM\*1040 CHEM\*1050
  - 1.00 - Physics (PHYS\*1070, PHYS\*1080) or (PHYS\*1000, PHYS\*1010)
  - 0.50 - Mathematics MATH\*1080 or MATH\*1200
  - 0.50 - Mathematical Science CIS\*1000, CIS\*1200, MATH\*1210, MATH\*2080,
2. Subject Area Core - 8.00 credits
  - 0.50 - BIOL\*2210
  - 0.50 - BIOC\*2580
  - 0.50 - MBG\*2000
  - 0.50 - STAT\*2040
  - 0.50 - from one of BIOL\*2060, BIOL\*3110, BOT\*2050
  - 0.50 - minimum from one of BIOM\*3100, BOT\*3310, HK\*3940, ZOO\*3200
  - 5.00 - biological science courses of which 4.00 must be at the 3000 or 4000 level\*
3. Science Electives - 4.00 credits
  - 1.00 - biological science courses
  - 3.00 - from science offerings on the list of Approved Courses of which at least 2.00 must be at the 3000 or 4000 level\*
4. Arts and Social Science Electives - 2.00 credits

2.00 - arts or social science courses from the list of Approved Courses  
5. Free Electives - 2.00 credits

\*the program must include at total of 6.00 science credits at the 3000 or 4000 level, 2.00 must be at the 4000 level

**Recommended Schedule of Studies**

**Semester 1**

BIOL\*1030 [0.50] Biology I  
CHEM\*1040 [0.50] General Chemistry I  
One of:  
MATH\*1080 [0.50] Elements of Calculus I  
MATH\*1200 [0.50] Calculus I  
One of:  
PHYS\*1000 [0.50] An Introduction to Mechanics  
PHYS\*1070 [0.50] Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL\*1040 [0.50] Biology II  
CHEM\*1050 [0.50] General Chemistry II  
0.50 Mathematical science from:  
CIS\*1000 [0.50] Introduction to Computer Applications  
CIS\*1200 [0.50] Introduction to Computing  
MATH\*1210 [0.50] Calculus II  
MATH\*2080 [0.50] Elements of Calculus II

One of:  
PHYS\*1010 [0.50] Introductory Electricity and Magnetism  
PHYS\*1080 [0.50] Physics for Life Sciences

0.50 Arts or Social Science electives

**Semester 3**

MBG\*2000 [0.50] Introductory Genetics  
0.50 Ecology from:  
BIOL\*2060 [0.50] Ecology  
BIOL\*3110 [0.50] Population Ecology  
BOT\*2050 [0.50] Plant Ecology

One of:  
BIOC\*2580 [0.50] Introductory Biochemistry  
BIOL\*2210 [0.50] Introductory Cell Biology

1.00 electives

**Semester 4**

STAT\*2040 [0.50] Statistics I  
One of:  
BIOC\*2580 [0.50] Introductory Biochemistry  
BIOL\*2210 [0.50] Introductory Cell Biology

1.50 electives

**Semester 5**

One course in Physiology from:  
BIOM\*3100 [0.50] Mammalian Physiology I  
BOT\*3310 [0.50] Plant Growth and Development  
HK\*3940 [1.25] Human Physiology  
ZOO\*3200 [0.50] Comparative Animal Physiology I

2.00 electives (1.25 electives if HK\*3940 is selected)

**Semester 6 to 8**

2.50 in each semester including 2.00 science credits per semester

Note: 6.00 in biological science must be taken in Semesters 6 through 8 of which 4.00 must be at the 3000 or 4000 level. In the total 6.00 of 3000 and 4000 level science courses, 2.00 must be at the 4000 level.

**Biology (BIOL)**

**College of Biological Science**

**Minor (Honours Program)**

A minor in Biology shall include the following courses:

BIOL\*1030 [0.50] Biology I  
BIOL\*1040 [0.50] Biology II  
BIOL\*2060 [0.50] Ecology  
BIOL\*2210 [0.50] Introductory Cell Biology  
MBG\*2000 [0.50] Introductory Genetics

and 2.50 of which 1.50 must be at the 3000 or 4000 level, from courses offered by the Human Health and Nutritional Sciences, Integrative Biology and Molecular and Cellular Biology . This minor is intended for students registered in majors in B.Sc. Physical Sciences and the B.A. degree programs.

## Bio-Medical Science (BIOM)

### Department of Biomedical Sciences and Department of Human Health and Nutritional Sciences

This joint program of the Department of Human Health and Nutritional Sciences and the Department of Biomedical Sciences focuses on the maintenance and promotion of human and animal health through the study of function (biochemistry and physiology), structure (anatomy and histology), and the basic medical sciences (epidemiology and pharmacology). It will permit graduates from this B.Sc. program to contribute to society in the area of health maintenance. The program is a good preparation for students intending to develop professional or research careers in the medical and biological sciences. Through the use of electives, students may structure a program emphasizing either nutritional sciences or principles of health and disease prevention. For more information on recommended electives contact the Faculty Advisor of the major.

Students who are admitted into the Biomedical Science major from high school must meet additional requirements to continue in the major beyond first year. Continuation is based on the cumulative average in the first two full-time semesters (5.00 credits), including the seven core courses as prescribed by the Schedule of Studies (see below). Students with a minimum of 75% average will be guaranteed continuation in this major. For students with a 70-74.9% average, continuation will be competitive based on available spaces. Students with an average below 70% will be changed to the Biological Science major. Students may subsequently change to another B.Sc. major of their choice.

B.Sc. students who were not admitted into the Biomedical Science major from high school and wish to declare the specialization at the end of the first year must apply directly to the Department of Biomedical Sciences by the last day of classes in the winter semester and meet the additional requirements specified above.

B.Sc. students beyond first year who wish to declare the specialization must apply directly to the Department of Biomedical Sciences by the last day of classes in the winter semester. Admission to the major will be based on the cumulative average in the previous two full-time semesters (5.00 credits). 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.

Students who are lacking in the fundamentals of word processing, spread sheet use and data management should arrange to complete CIS\*1000 as early in their program as possible.

This program is designed to partially meet the current requirements for an entry into medical schools in Ontario (a student interested in meeting these requirements should check the present admission requirements for the medical schools); as well as entry into the DVM program of the Ontario Veterinary College.

Live animals and/or animal tissues are used for teaching purposes in some courses in the Bio-Medical Science Major. This must be accepted by students admitted to the program. All animals are protected under 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.

### Major (Honours Program)

A minimum of 20.00 credits is required.

Note: Students are required to complete 16.00 credits in science of which a minimum of 2.00 credits must be at the 4000 level.

#### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives or restricted electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

1.00 electives or restricted electives

#### Semester 3 (see admission statement above)

BIOC*2580	[0.50]	Introductory Biochemistry
BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2000	[0.50]	Introductory Genetics
STAT*2040	[0.50]	Statistics I

0.50 electives or restricted electives

#### Semester 4

BIOC*3560	[0.50]	Structure and Function in Biochemistry
MBG*2020	[0.50]	Introductory Molecular Biology
NUTR*3210	[0.50]	Fundamentals of Nutrition

1.00 electives or restricted electives

#### Semester 5

POPM*3240	[0.50]	Epidemiology
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One of:

BIOM*3100	[0.50]	Mammalian Physiology I
HK*3940	[1.25]	Human Physiology

If BIOM\*3100 is selected, then BIOM\*3110 and BIOM\*3120 must be taken in Semester 6.

Electives or restricted electives (to a maximum of 2.75 total credits).

#### Semester 6

BIOM*3040	[0.50]	Medical Embryology
BIOM*3090	[0.50]	Principles of Pharmacology and Toxicology

Electives or restricted electives to a maximum of 2.75 total credits.

Note: As part of the electives or restricted electives students must select BIOM\*3110 and BIOM\*3120 in Semester 6 if BIOM\*3100 was selected in Semester 5.

#### Semester 7

One of:

MICR*3230	[0.50]	Immunology I
NUTR*4200	[0.50]	Nutrition and Immune Function

One of:

BIOM*3030	[0.75]	Biomedical Histology
ZOO*3000	[0.50]	Comparative Histology

Electives or restricted electives to a maximum of 2.75 total credits.

#### Semester 8

PATH*3610	[0.50]	Principles of Disease
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2.00 electives or restricted electives\*

#### Restricted Electives

- 1 anatomy course from BIOM\*3010, HK\*3401/2, ZOO\*2090 must be completed.
- A minimum of 1.00 and to a maximum of 2.00 in research experience may be met either by:
  - completing both HK\*4410 and HK\*4420
  - completing HK\*4410 and either HK\*4230 or BIOM\*4500
  - completing both HK\*4230 and BIOM\*4500
  - completing one of the 1.00 credits in research courses in either the Department of Human Health and Nutritional Sciences (HK\*4360 or HK\*4371/2) or in the Department of Biomedical Sciences (BIOM\*4510 or BIOM\*4521/2)
  - equivalent course from another department with the permission of the Faculty Advisor
- A total of 2.00 credits in Arts and Social Science courses including:
  - 0.50 credits in philosophy and ethics from PHIL\*2030, PHIL\*2070, PHIL\*2100, PHIL\*2120, PHIL\*2180
  - 0.50 credits in either psychology (PSYC\*XXXX) or sociology (SOC\*XXXX)

## Biomedical Toxicology (BTOX)

### Interdisciplinary Program, Department of Biomedical Sciences, Ontario Veterinary College

### Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor.

#### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives\*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 electives\*

#### Semester 3

BIOC*2580	[0.50]	Introductory Biochemistry
BIOL*2210	[0.50]	Introductory Cell Biology
CHEM*2480	[0.50]	Analytical Chemistry I
TOX*2000	[0.50]	Principles of Toxicology

0.50 electives\*

#### Semester 4

CHEM*2700	[0.50]	Organic Chemistry I
MBG*2000	[0.50]	Introductory Genetics

NUTR*3210	[0.50]	Fundamentals of Nutrition
STAT*2050	[0.50]	Statistics II

0.50 electives\*

**Semester 5**

BIOM*3030	[0.75]	Biomedical Histology
BIOM*3100	[0.50]	Mammalian Physiology I
MBG*2020	[0.50]	Introductory Molecular Biology
TOX*3300	[0.50]	Analytical Toxicology

0.50 electives\*

**Semester 6**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
BIOM*3090	[0.50]	Principles of Pharmacology and Toxicology
BIOM*3110	[0.50]	Mammalian Physiology II
BIOM*3120	[0.25]	Laboratory Exercises in Mammalian Physiology
PATH*3610	[0.50]	Principles of Disease

0.50 electives\*

**Semester 7**

BIOM*4090	[0.50]	Pharmacology
MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
NUTR*4510	[0.50]	Toxicology, Nutrition and Food
TOX*4000	[0.50]	Medical Toxicology
TOX*4590	[0.50]	Biochemical Toxicology

**Semester 8**

STAT*3510	[0.50]	Environmental Risk Assessment
TOX*4100	[0.50]	Toxicological Pathology
TOX*4200	[0.50]	Topics in Toxicology

0.50 electives\*

\*a minimum of 1.50 must be taken in the College of Arts or the College of Social and Applied Human Sciences

**Biomedical Toxicology (Co-op) (BTOX:C)**

**Interdisciplinary Program, Department of Biomedical Sciences, Ontario Veterinary College**

**Major (Honours Program)**

A 70% average in courses completed in semesters 1 and 2 is normally required for admission to semester 3 of this program. An optional fourth co-op work term is available.

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives\*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 electives\*

**Semester 3 - Fall**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2480	[0.50]	Analytical Chemistry I
MBG*2000	[0.50]	Introductory Genetics
TOX*2000	[0.50]	Principles of Toxicology

0.50 electives

**Winter**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOL*2210	[0.50]	Introductory Cell Biology
CHEM*2700	[0.50]	Organic Chemistry I
PATH*3610	[0.50]	Principles of Disease
STAT*2050	[0.50]	Statistics II

0.50 electives

**Fall**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
MBG*2020	[0.50]	Introductory Molecular Biology
NUTR*3210	[0.50]	Fundamentals of Nutrition
STAT*3510	[0.50]	Environmental Risk Assessment

0.50 electives

**Summer**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

BIOM*3030	[0.75]	Biomedical Histology
BIOM*3100	[0.50]	Mammalian Physiology I
NUTR*4510	[0.50]	Toxicology, Nutrition and Food
TOX*3300	[0.50]	Analytical Toxicology

0.50 electives

**Semester 7 - Winter**

BIOM*3090	[0.50]	Principles of Pharmacology and Toxicology
BIOM*3110	[0.50]	Mammalian Physiology II
BIOM*3120	[0.25]	Laboratory Exercises in Mammalian Physiology
TOX*4100	[0.50]	Toxicological Pathology
TOX*4200	[0.50]	Topics in Toxicology

0.50 electives

**Semester 8 - Fall**

BIOM*4090	[0.50]	Pharmacology
MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
TOX*4000	[0.50]	Medical Toxicology
TOX*4590	[0.50]	Biochemical Toxicology

0.50 electives

**Biophysics (BIOP)**

**Department of Physics, College of Physical and Engineering Science**

**Major (Honours Program)**

The program emphasizes the physics of biological systems. It provides an excellent background for careers in the expanding interdisciplinary research laboratories of Government and Industry. Completion of the program at an appropriate level will qualify a student to pursue post-graduate studies in biophysics and certain areas of physics.

Since some of the required courses are not offered every semester, students entering the Major in Biophysics should plan their program in consultation with the Department of Physics Departmental Advisor.

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. This major requires the completion of 21.25 credits as indicated below:

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming

One of (MATH\*1200 recommended):

MATH*1080	[0.50]	Elements of Calculus I
MATH*1200	[0.50]	Calculus I

One of (PHYS\*1000 recommended):

PHYS*1000	[0.50]	An Introduction to Mechanics
PHYS*1070	[0.50]	Introductory Physics for Life Sciences
PHYS*1080	[0.50]	Physics for Life Sciences

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II

1 physics course from the following list (PHYS\*1010 recommended):

PHYS*1010	[0.50]	Introductory Electricity and Magnetism
PHYS*1080	[0.50]	Physics for Life Sciences
PHYS*1130	[0.50]	Physics with Applications

One of (MATH\*1210 recommended):

MATH*1210	[0.50]	Calculus II
MATH*2080	[0.50]	Elements of Calculus II

0.50 Arts or Social Science electives

**Semester 3**

MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I

One of:

BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2000	[0.50]	Introductory Genetics

**Semester 4**

MATH*2170	[0.50]	Differential Equations I
PHYS*2030	[0.50]	Biophysics of Excitable Cells
PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
PHYS*2450	[0.75]	Mechanics II

PHYS\*2470 [0.75] Electricity and Magnetism II

**Semester 5**

BIOC\*2580 [0.50] Introductory Biochemistry  
 MATH\*3100 [0.50] Differential Equations II  
 PHYS\*3100 [0.75] Electronics  
 PHYS\*3230 [0.50] Quantum Mechanics I  
 PHYS\*3240 [0.50] Statistical Physics I

**Semester 6**

BIOC\*3560 [0.50] Structure and Function in Biochemistry  
 PHYS\*3220 [0.50] Waves and Optics  
 PHYS\*3510 [0.50] Intermediate Laboratory  
 PHYS\*4040 [0.50] Quantum Mechanics II  
 PHYS\*4540 [0.50] Molecular Biophysics

**Semester 7**

MCB\*4050 [0.50] Protein and Nucleic Acid Structure  
 PHYS\*4240 [0.50] Statistical Physics II  
 PHYS\*4560 [0.50] Biophysical Methods

One of:

PHYS\*4120 [0.50] Atomic and Molecular Physics  
 0.50 electives

One of:

PHYS\*4500 [0.50] Advanced Physics Laboratory  
 0.50 electives

Note: At least one of PHYS\*4120 in semester 7 or PHYS\*4150 in semester 8 must be taken.

**Semester 8**

BIOC\*4580 [0.50] Membrane Biochemistry  
 PHYS\*4510 [0.50] Advanced Physics Project

One of:

PHYS\*4150 [0.50] Solid State Physics  
 0.50 electives

0.50 Arts or Social Science electives

0.50 electives

Note: At least one of PHYS\*4120 in semester 7 or PHYS\*4150 in semester 8 must be taken.

Note: PHYS\*4510 will be projects in biophysics, some of which may be in biological areas outside the Department of Physics.

**Biophysics (Co-op) (BIOP:C)**

Department of Physics, College of Physical and Engineering Science

**Major (Honours Program)**

Since some of the required courses are not offered every semester, students entering the Major in Biophysics (Co-op) should plan their program in consultation with the Department of Physics Faculty Advisor.

To graduate from the Co-op program a minimum of 4 successfully completed work terms is normally required.

This major requires the completion of 21.25 credits as indicated below:

**Semester 1 - Fall**

The program for the first semester is the same as the Major in Biophysics (regular) program.

**Semester 2 - Winter**

BIOL\*1040 [0.50] Biology II  
 CHEM\*1050 [0.50] General Chemistry II  
 COOP\*1100 [0.00] Introduction to Co-operative Education  
 1 physics course from the following list (PHYS\*1010 recommended):  
 PHYS\*1010 [0.50] Introductory Electricity and Magnetism  
 PHYS\*1080 [0.50] Physics for Life Sciences  
 PHYS\*1130 [0.50] Physics with Applications

One of:

CIS\*2500 [0.50] Intermediate Programming  
 0.50 Arts or Social Science electives

One of:

MATH\*1210 [0.50] Calculus II  
 MATH\*2080 [0.50] Elements of Calculus II

**Semester 3 - Fall**

MATH\*2160 [0.50] Linear Algebra I  
 MATH\*2200 [0.50] Advanced Calculus I  
 PHYS\*2440 [0.75] Mechanics I  
 PHYS\*2460 [0.75] Electricity and Magnetism I

One of:

BIOL\*2210 [0.50] Introductory Cell Biology  
 MBG\*2000 [0.50] Introductory Genetics

**Winter Semester**

COOP\*1000 [0.00] Co-op Work Term I

**Semester 4 - Summer**

BIOC\*2580 [0.50] Introductory Biochemistry  
 MATH\*2170 [0.50] Differential Equations I  
 PHYS\*2260 [0.50] Experimental Basis of Quantum Physics  
 PHYS\*3240 [0.50] Statistical Physics I

0.50 Arts or Social Science electives\*

\*1.00 must be taken as Arts or Social Science electives in this Major

**Fall Semester**

COOP\*2000 [0.00] Co-op Work Term II

**Semester 5 - Winter**

BIOC\*3560 [0.50] Structure and Function in Biochemistry  
 PHYS\*2030 [0.50] Biophysics of Excitable Cells  
 PHYS\*2450 [0.75] Mechanics II  
 PHYS\*2470 [0.75] Electricity and Magnetism II  
 PHYS\*3220 [0.50] Waves and Optics

**Summer Semester**

COOP\*3000 [0.00] Co-op Work Term III

**Semester 6 - Fall**

MATH\*3100 [0.50] Differential Equations II  
 PHYS\*3100 [0.75] Electronics  
 PHYS\*3230 [0.50] Quantum Mechanics I  
 1.00 electives

**Semester 7 - Winter**

BIOC\*4580 [0.50] Membrane Biochemistry  
 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 [0.00] Co-op Work Term IV

**Semester 8 - Fall**

MCB\*4050 [0.50] Protein and Nucleic Acid Structure  
 PHYS\*4120 [0.50] Atomic and Molecular Physics  
 PHYS\*4240 [0.50] Statistical Physics II  
 PHYS\*4560 [0.50] Biophysical Methods

One of:

PHYS\*4500 [0.50] Advanced Physics Laboratory  
 0.50 electives

**Biotechnology (BIOT)**

Department of Molecular and Cellular Biology, College of Biological Science

**Minor (Honours Program)**

A minimum of 5.00 credits is required.

BIOC\*3560 [0.50] Structure and Function in Biochemistry  
 MBG\*2020 [0.50] Introductory Molecular Biology  
 MICR\*2020 [0.50] Microbial Interactions and Associations  
 MICR\*2030 [0.50] Microbial Growth

One of:

ENGG\*2660 [0.50] Biological Engineering Systems I  
 ENGG\*3830 [0.50] Bio-Process Engineering  
 FOOD\*4350 [0.50] Processing Plant Technology

Two of:

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

Three of:

ANSC\*2200 [0.50] Principles of Aquaculture  
 ANSC\*4050 [0.50] Biotechnology in Animal Science  
 FOOD\*3260 [0.50] Industrial Microbiology  
 MBG\*4240 [0.50] Applied Molecular Genetics  
 MCB\*4080 [0.50] Applied Microbiology and Biochemistry  
 MICR\*3230 [0.50] Immunology I  
 MICR\*4180 [0.50] Microbial Processes in Environmental Management  
 PBIO\*3750 [0.50] Plant Tissue Culture

**Business Administration (BADM)**

Department of Economics, College of Social and Applied Human Sciences

**Minor (Honours Program)**

A minimum of 5.00 credits is required.

AGEC\*2220 [0.50] Financial Accounting  
 AGECE\*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*3560	[0.50]	Theory of Finance
MCS*3040	[0.50]	Business and Consumer Law

One of:

AGEC*3310	[0.50]	Operations Management
HTM*4390	[0.50]	Individuals and Groups in Organizations

One of:

AGEC*4370	[0.50]	Marketing Management
MCS*1000	[0.50]	Introductory Marketing

Students wishing to acquire further depth in Business Administration should consider taking electives from the areas of study listed under Management Economics in the B.A. degree.

### Chemical Physics (CHPY)

**Administered by the Office of the Dean, College of Physical and Engineering Science 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 must consult the Faculty Advisor. A minimum of 21.75 credits is required.

##### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics
CIS*1500	[0.50]	Introduction to Programming

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

##### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 Arts or Social Science electives

##### Semester 3

CHEM*2060	[0.50]	Structure and Bonding
MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I

##### Semester 4

CHEM*2070	[0.50]	Structure and Spectroscopy
CHEM*2480	[0.50]	Analytical Chemistry I
MATH*2170	[0.50]	Differential Equations I
PHYS*2450	[0.75]	Mechanics II
PHYS*2470	[0.75]	Electricity and Magnetism II

##### Semester 5

CHEM*2820	[0.50]	Thermodynamics and Kinetics
CHEM*3860	[0.50]	Quantum Chemistry
PHYS*3100	[0.75]	Electronics
PHYS*3230	[0.50]	Quantum Mechanics I
PHYS*3240	[0.50]	Statistical Physics I

##### Semester 6

CHEM*3430	[0.50]	Analytical Chemistry II: Instrumental Analysis
PHYS*3220	[0.50]	Waves and Optics
PHYS*4040	[0.50]	Quantum Mechanics II

One of:

CHEM*3870	[0.50]	Symmetry and Spectroscopy
CHEM*4880	[0.50]	Topics in Advanced Physical Chemistry

0.50 Arts or Social Science electives

##### Semester 7

CHEM*3440	[0.50]	Analytical Chemistry III: Analytical Instrumentation
IPS*4001	[0.75]	Chemical Physics Research Project
MATH*3100	[0.50]	Differential Equations II
PHYS*4120	[0.50]	Atomic and Molecular Physics
PHYS*4240	[0.50]	Statistical Physics II

##### Semester 8

IPS*4002	[0.75]	Chemical Physics Research Project
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One of:

CHEM*3870	[0.50]	Symmetry and Spectroscopy
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CHEM*4880	[0.50]	Topics in Advanced Physical Chemistry
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1.50 electives

### Chemical Physics (Co-op) (CHPY:C)

**Administered by the Office of the Dean, College of Physical and Engineering Science on behalf of the Department of Chemistry and the Department of Physics**

#### Major (Honours Program)

A minimum of 21.25 credits is required.

##### Semester 1 - Fall

The program for the first semester is the same as for the Major in Chemical Physics (regular) program.

##### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

One of:

CIS*2500	[0.50]	Intermediate Programming
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0.50 Arts or Social Science electives

##### Semester 3 - Fall

CHEM*2060	[0.50]	Structure and Bonding
MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I

##### Winter Semester

COOP*1000	[0.00]	Co-op Work Term I
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##### Semester 4 - Summer

CHEM*2070	[0.50]	Structure and Spectroscopy
CHEM*2480	[0.50]	Analytical Chemistry I
MATH*2170	[0.50]	Differential Equations I
PHYS*3240	[0.50]	Statistical Physics I

0.50 Arts or Social Science electives

##### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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##### Semester 5 - Winter

CHEM*3430	[0.50]	Analytical Chemistry II: Instrumental Analysis
PHYS*2450	[0.75]	Mechanics II
PHYS*2470	[0.75]	Electricity and Magnetism II
PHYS*3220	[0.50]	Waves and Optics

One of:

CHEM*3870	[0.50]	Symmetry and Spectroscopy
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0.50 electives

##### Summer Semester

COOP*3000	[0.00]	Co-op Work Term III
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##### Semester 6 - Fall

CHEM*2820	[0.50]	Thermodynamics and Kinetics
CHEM*3440	[0.50]	Analytical Chemistry III: Analytical Instrumentation
CHEM*3860	[0.50]	Quantum Chemistry
PHYS*3230	[0.50]	Quantum Mechanics I

One of:

CHEM*3640	[0.50]	Chemistry of the Elements I
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0.50 electives

##### Semester 7\*\* - Winter

PHYS*4040	[0.50]	Quantum Mechanics II
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One of:

CHEM*3870	[0.50]	Symmetry and Spectroscopy
CHEM*4880	[0.50]	Topics in Advanced Physical Chemistry

0.50 Arts or Social Science electives

1.00 electives

##### Summer Semester

COOP*4000	[0.00]	Co-op Work Term IV
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##### Semester 8\*\* - Fall

MATH*3100	[0.50]	Differential Equations II
PHYS*3100	[0.75]	Electronics
PHYS*4120	[0.50]	Atomic and Molecular Physics
PHYS*4240	[0.50]	Statistical Physics II

0.50 electives

\*\* A minimum of 2.00 credits in science courses at the 4000 level is required for graduation.

**Chemistry (CHEM)****Department of Chemistry, College of Physical and Engineering Science****Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. The major will require the completion of 20.25 credits as indicated below:

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 electives

**Semester 3**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2060	[0.50]	Structure and Bonding
CHEM*2400	[0.75]	Analytical Chemistry I

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

0.50 electives\*

**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
MATH*2170	[0.50]	Differential Equations I

0.50 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
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3.00 Chemistry or Biochemistry\*\*

1.50 electives\*

\*selection of electives is subject to the following rules:

1. at least 1.00 credits in the program must be in the Arts & Social Sciences
2. PHYS\*2040 or PHYS\*2260
3. students who lack a background in computer science must select one of their electives from CIS\*1200 or CIS\*1500 to be taken by the end of their second year
4. approval of the chair of the Department of Chemistry and Biochemistry must be obtained for the selection of courses not specifically recommended
5. 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 Departmental 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\*4550, BIOC\*4570, BIOC\*4580, CHEM\*4620, CHEM\*4630, CHEM\*4720, CHEM\*4730, CHEM\*4740, CHEM\*4880, CHEM\*4900, CHEM\*4910, TOX\*4590

**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.

**Minor (Honours Program)**

A minor in Chemistry consists of at least 5.00 credits from the core course list and 2.50 from Chemistry at the 2000 level or above including 1.00 from the Restricted Electives list that follows:

**Core Courses**

CHEM*2060	[0.50]	Structure and Bonding
CHEM*2070	[0.50]	Structure and Spectroscopy
CHEM*2700	[0.50]	Organic Chemistry I

One of:

CHEM*2400	[0.75]	Analytical Chemistry I
CHEM*2480	[0.50]	Analytical Chemistry I

One of:

CHEM*2820	[0.50]	Thermodynamics and Kinetics
CHEM*2880	[0.50]	Physical Chemistry

**Restricted Electives - 1.00 credits from the following courses:**

CHEM*3870	[0.50]	Symmetry and Spectroscopy
CHEM*4010	[0.50]	Chemistry and Industry
CHEM*4400	[0.50]	Advanced Topics in Analytical Chemistry
CHEM*4620	[0.50]	Advanced Topics in Inorganic Chemistry
CHEM*4630	[0.50]	Bioinorganic Chemistry
CHEM*4720	[0.50]	Organic Reactivity
CHEM*4730	[0.50]	Synthetic Organic Chemistry
CHEM*4880	[0.50]	Topics in Advanced Physical Chemistry

**Chemistry (Co-op) (CHEM:C)****Department of Chemistry, College of Physical and Engineering Science****Major (Honours Program)**

The major will require the completion of 20.25 credits as indicated below.

The course content of semesters 1 to 3 is the same as listed in the regular Honours Program Major.

To graduate from the Co-op program a minimum of 4 successfully completed work terms is normally required. These can be taken as four single work terms (Stream A), or as a double work term between two single work terms (Stream B).

**Stream A:** single work term option

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 electives

**Semester 3 - Fall**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2060	[0.50]	Structure and Bonding
CHEM*2400	[0.75]	Analytical Chemistry I

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

0.50 electives\*

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**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
MATH*2170	[0.50]	Differential Equations I

0.50 electives\*

**Semester 5 - Fall**

CHEM*2820	[0.50]	Thermodynamics and Kinetics
CHEM*3440	[0.50]	Analytical Chemistry III: Analytical Instrumentation
CHEM*3640	[0.50]	Chemistry of the Elements I

CHEM*3860	[0.50]	Quantum Chemistry
0.50 electives*		
<b>Winter Semester</b>		
COOP*2000	[0.00]	Co-op Work Term II
<b>Semester 6 - Summer</b>		
CHEM*3750	[0.50]	Organic Chemistry II
One of:		
PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
0.50 electives*		

1.50 electives\* or restricted electives\*\*

#### Fall Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Semester 7 - 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*4000	[0.00]	Co-op Work Term IV
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#### Semester 8 - Fall

2.50 electives\* or restricted electives\*\*

\* selection of electives is subject to the following rules:

1. At least 1.00 credits in the program must be in the Arts & Social Sciences.
2. PHYS\*2040 or PHYS\*2260
3. Students who lack a background in computer science must select one of their electives from CIS\*1200 or CIS\*1500 to be taken by the end of their second year.

\*\* 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\*4550, BIOC\*4570, BIOC\*4580, CHEM\*4620, CHEM\*4630, CHEM\*4720, CHEM\*4730, CHEM\*4740, CHEM\*4880, CHEM\*4900, CHEM\*4910, 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.

**Stream B:** double work term option

#### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 electives

#### Semester 3 - Fall

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2060	[0.50]	Structure and Bonding
CHEM*2400	[0.75]	Analytical Chemistry I

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

0.50 electives\*

#### Winter Semester

COOP*1000	[0.00]	Co-op Work Term I
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#### 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
MATH*2170	[0.50]	Differential Equations I

0.50 electives\*

#### Semester 5 - Fall

CHEM*2820	[0.50]	Thermodynamics and Kinetics
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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

One of:

PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
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0.50 electives\*

1.00 electives\* or restricted electives\*\*

#### Summer Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Fall Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Semester 7 - Winter

2.50 electives\* or restricted electives\*\*

#### Summer Semester

COOP*4000	[0.00]	Co-op Work Term IV
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#### Semester 8 - Fall

CHEM*3440	[0.50]	Analytical Chemistry III: Analytical Instrumentation
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2.00 electives\* or restricted electives\*\*

\* selection of electives is subject to the following rules:

1. At least 1.00 credits in the program must be in the Arts & Social Sciences.
2. PHYS\*2040 or PHYS\*2260
3. Students who lack a background in computer science must select one of their electives from CIS\*1200 or CIS\*1500 to be taken by the end of their second year.

\*\* 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\*4550, BIOC\*4570, BIOC\*4580, CHEM\*4620, CHEM\*4630, CHEM\*4720, CHEM\*4730, CHEM\*4740, CHEM\*4880, CHEM\*4900, CHEM\*4910, 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)

#### Department of Computing and Information Science, College of Physical and Engineering Science

The B.Sc. Programs in Computing and Information Science (CIS) provide a solid foundation in software design and computer applications, especially in the physical and biological sciences. The Major offers substantial computing experience, as well as an understanding of both fundamental principles and modern applications. The minor provides sufficient software experience to enable significant contribution to many areas of application.

#### Computing and Information Science Major (Honours Program)

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. The Major requires 12.0 credits in computing, mathematics and statistics, of which 2.5 credits are CIS electives. Other electives must include at least 1.50 in science courses with at least 0.50 at the 3000 level or above. At least 1.00 credits must be in the Arts of Social Sciences, and 0.50 remaining credits in the introductory science sequence (see note in semester 2)

#### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2

CIS*1910	[0.50]	Discrete Structures in Computing I
CIS*2500	[0.50]	Intermediate Programming
MATH*1210	[0.50]	Calculus II

Two of (only one of PHYS\*1010 or PHYS\*1130 may be selected): \*

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

PHYS\*1130 [0.50] Physics with Applications

\*Note: A third course from this list must be taken before graduation.

### Semester 3

CIS\*2030 [0.50] Structure and Application of Microcomputers  
 CIS\*2430 [0.50] Object Oriented Programming  
 CIS\*2520 [0.50] Data Structures  
 CIS\*2910 [0.50] Discrete Structures in Computing II  
 MATH\*2150 [0.50] Applied Matrix Algebra

### Semester 4

CIS\*2750 [0.75] Software Systems Development and Integration  
 CIS\*3110 [0.50] Operating Systems  
 STAT\*2040 [0.50] Statistics I

0.75 electives

### Semester 5

CIS\*2460 [0.50] Modelling of Computer Systems  
 CIS\*3530 [0.50] Data Base Systems and Concepts  
 CIS\*3750 [0.75] System Analysis and Design in Applications

One of:

MATH\*3240 [0.50] Operations Research  
 0.50 electives

Note: MATH\*2130 in Semester 6 or MATH\*3240 in Semester 5 must be taken.

0.25 elective

### Semester 6

CIS\*3490 [0.50] The Analysis and Design of Computer Algorithms

One of:

MATH\*2130 [0.50] Numerical Methods  
 0.50 electives

Note: MATH\*2130 in Semester 6 or MATH\*3240 in Semester 5 must be taken.

1.00 CIS electives at the 3000 level or above ( CIS\*3200 [0.75]recommended)

0.50 electives

### Semester 7

0.50 CIS electives at 3000 level or above

1.00 4000 level CIS credits

1.00 electives

### Semester 8

1.00 CIS credits at the 4000 level

1.50 electives

The minor program requires at least 5.25 credits, including:

### Minor (Honours Program)

CIS\*1500 [0.50] Introduction to Programming  
 CIS\*1910 [0.50] Discrete Structures in Computing I  
 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  
 CIS\*2910 [0.50] Discrete Structures in Computing II  
 CIS\*3530 [0.50] Data Base Systems and Concepts

1.00 additional credits from CIS or STAT courses at the 2000 level or above

### Computing and Information Science (Co-op) (CIS:C)

#### Department of Computing and Information Science, College of Physical and Engineering Science

The 4 year Honours Program Major in Computing and Information Science is also available as a Co-operative Education Program. Three co-op work terms are required. Recommended work terms are shown below:

COOP\*1100 must be completed in the 2nd academic semester (winter of year 1). Students may apply for these options at the time of University admission or completion of semester 2. A five year option with four work terms is also available. Please see the department's co-op faculty advisor for details.

Conditions for graduation are the same as the corresponding regular B.Sc. program. In addition, all work reports must have a grade of satisfactory or better.

Electives must include at least 1.50 at the 3000 level or above. At least 1.00 credits must be in the Arts or Social Sciences, and 0.50 remaining credit in the introductory science sequence (see note in semester 2).

### The recommended schedule of studies for Co-Op Stream A (4-year) is as follows:

#### Semester 1 - Fall

BIOL\*1030 [0.50] Biology I  
 CHEM\*1040 [0.50] General Chemistry I  
 CIS\*1500 [0.50] Introduction to Programming  
 MATH\*1200 [0.50] Calculus I  
 PHYS\*1000 [0.50] An Introduction to Mechanics

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2 - Winter

CIS\*1910 [0.50] Discrete Structures in Computing I  
 CIS\*2500 [0.50] Intermediate Programming  
 COOP\*1100 [0.00] Introduction to Co-operative Education  
 MATH\*1210 [0.50] Calculus II

Two of (only one of PHYS\*1010 or PHYS\*1130 may be selected): \*

BIOL\*1040 [0.50] Biology II  
 CHEM\*1050 [0.50] General Chemistry II  
 PHYS\*1010 [0.50] Introductory Electricity and Magnetism  
 PHYS\*1130 [0.50] Physics with Applications

\*Note: A third course from this list must be taken before graduation.

#### Semester 3- Summer

CIS\*2030 [0.50] Structure and Application of Microcomputers  
 CIS\*2430 [0.50] Object Oriented Programming  
 CIS\*2520 [0.50] Data Structures  
 CIS\*2910 [0.50] Discrete Structures in Computing II  
 MATH\*2150 [0.50] Applied Matrix Algebra

#### Fall Semester

COOP\*1000 [0.00] Co-op Work Term I

#### Semester 4 - Winter

CIS\*2750 [0.75] Software Systems Development and Integration  
 CIS\*3110 [0.50] Operating Systems  
 STAT\*2040 [0.50] Statistics I

0.75 electives

#### Summer Semester

COOP\*2000 [0.00] Co-op Work Term II

#### Semester 5 - Fall

CIS\*2460 [0.50] Modelling of Computer Systems  
 CIS\*3530 [0.50] Data Base Systems and Concepts  
 CIS\*3750 [0.75] System Analysis and Design in Applications

One of:

MATH\*3240 [0.50] Operations Research  
 (Note: requires co-requisite of MATH\*2200)  
 0.50 electives

Note: MATH\*2130 in Semester 6 or MATH\*3240 in Semester 5 must be taken.

0.25 elective

#### Winter Semester

COOP\*3000 [0.00] Co-op Work Term III

#### Semester 6 - Summer

CIS\*3490 [0.50] The Analysis and Design of Computer Algorithms

One of:

MATH\*2130 [0.50] Numerical Methods  
 0.50 electives

Note: MATH\*2130 in Semester 6 or MATH\*3240 in Semester 5 must be taken.

1.00 CIS electives at the 3000 level or above ( CIS\*3200 [0.75]recommended)

0.50 electives

#### Semester 7 - Fall

0.50 CIS electives at 3000 level or above

1.00 electives

1.00 credits in CIS at the 4000 level

#### Semester 8 - Winter

1.50 electives

1.00 credits in CIS at the 4000 level

### The recommended schedule of studies for Co-Op Stream B(5-year) is as follows:

#### Semester 1 - Fall

BIOL\*1030 [0.50] Biology I  
 CHEM\*1040 [0.50] General Chemistry I  
 CIS\*1500 [0.50] Introduction to Programming  
 MATH\*1200 [0.50] Calculus I  
 PHYS\*1000 [0.50] An Introduction to Mechanics

#### Semester 2 - Winter

CIS\*1910 [0.50] Discrete Structures in Computing I  
 CIS\*2500 [0.50] Intermediate Programming  
 COOP\*1100 [0.00] Introduction to Co-operative Education  
 MATH\*1210 [0.50] Calculus II

Two of (only one of PHYS\*1010 or PHYS\*1130 may be selected): \*

BIOL\*1040 [0.50] Biology II  
 CHEM\*1050 [0.50] General Chemistry II  
 PHYS\*1010 [0.50] Introductory Electricity and Magnetism

PHYS\*1130 [0.50] Physics with Applications

\*Note: A third course from this list must be taken before graduation.

### Summer Semester Off

#### Semester 3 - Fall

CIS\*2030 [0.50] Structure and Application of Microcomputers  
 CIS\*2430 [0.50] Object Oriented Programming  
 CIS\*2520 [0.50] Data Structures  
 CIS\*2910 [0.50] Discrete Structures in Computing II  
 MATH\*2150 [0.50] Applied Matrix Algebra

#### Semester 4 - Winter

CIS\*2750 [0.75] Software Systems Development and Integration  
 CIS\*3110 [0.50] Operating Systems  
 STAT\*2040 [0.50] Statistics I

Note: STAT\*2100 (F) is an acceptable replacement for STAT\*2040 .

0.25 elective

#### Summer Semester

COOP\*1000 [0.00] Co-op Work Term I

#### Semester 5 - Fall

CIS\*2460 [0.50] Modelling of Computer Systems  
 CIS\*3530 [0.50] Data Base Systems and Concepts  
 CIS\*3750 [0.75] System Analysis and Design in Applications

0.25 elective

One of:

MATH\*3240 [0.50] Operations Research

(Note: requires co-requisite of MATH\*2200).

0.50 electives

Note: MATH\*2130 in Semester 6 or MATH\*3240 in Semester 5 must be taken. CIS\*3210 should be taken here to enable subsequent courses in distributed systems.

#### Winter Semester

COOP\*2000 [0.00] Co-op Work Term II

#### Semester 6 - Summer

CIS\*3490 [0.50] The Analysis and Design of Computer Algorithms

One of:

MATH\*2130 [0.50] Numerical Methods

0.50 electives

Note: MATH\*2130 in Semester 6 or MATH\*3240 in Semester 5 must be taken.

1.00 CIS electives at the 3000 level or above ( CIS\*3200 [0.75] recommended)

0.50 electives

#### Fall Semester

COOP\*3000 [0.00] Co-op Work Term III

#### Semester 7 - Winter

0.50 CIS electives at 3000 level or above

1.00 electives

1.00 credits in CIS at the 4000 level

#### Summer Semester

COOP\*4000 [0.00] Co-op Work Term IV

#### Semester 8 - Fall

1.50 electives

1.00 credits in CIS at the 4000 level

### Earth Surface Science (ESS)

Department of Geography, College of Social and Applied Human Sciences

Department of Land Resource Science, Ontario Agricultural College

This program combines elements of Geomorphology, Geology and Meteorology and focuses on the study of processes and properties of the abiotic component of the environment.

Graduates of the program should meet the knowledge requirements for eligibility to apply for membership as Environmental Geoscientists in the Association of Professional Geoscientists of Ontario (APGO), allowing for use of the designation P. Geo.

Students may enter this major in Semester I or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. Students planning to enter the program are advised to consult advisors in either of the two departments. Students needing program approval should contact the B.Sc. Advisors in the Department of Geography.

### Major (Honours Program)

#### Semester 1

BIOL\*1030 [0.50] Biology I  
 CHEM\*1040 [0.50] General Chemistry I  
 GEOL\*1050 [0.50] Geology and the Environment  
 PHYS\*1080 [0.50] Physics for Life Sciences

0.50 Mathematics course from:

MATH\*1080 [0.50] Elements of Calculus I

MATH\*1200 [0.50] Calculus I

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2

BIOL\*1040 [0.50] Biology II  
 CHEM\*1050 [0.50] General Chemistry II  
 PHYS\*1130 [0.50] Physics with Applications  
 GEOG\*1300 [0.50] Introduction to the Biophysical Environment

0.50 Arts or Social Science electives

#### Semester 3 and 4

GEOG\*2000 [0.50] Geomorphology  
 GEOG\*2110 [0.50] Climate and the Biophysical Environment  
 GEOL\*2020 [0.50] Stratigraphy  
 GEOL\*2200 [0.50] Glacial Geology  
 MET\*2030 [0.50] Meteorology and Climatology  
 SOIL\*2010 [0.50] Soil Science

0.50 Mathematics/Computer Science from:

CIS\*1200 [0.50] Introduction to Computing

CIS\*1500 [0.50] Introduction to Programming

MATH\*1210 [0.50] Calculus II

MATH\*2080 [0.50] Elements of Calculus II

One of:

GEOG\*2460 [0.50] Analysis in Geography

STAT\*2040 [0.50] Statistics I

0.50 Arts or Social Science electives

0.50 electives

#### Semester 5 and 6

GEOG\*3000 [0.50] Fluvial Processes  
 GEOG\*3610 [0.50] Environmental Hydrology  
 GEOL\*2110 [0.50] Earth Material Science  
 GEOL\*3190 [0.50] Environmental Water Chemistry

1.50 from List A

1.50 electives

#### Semester 7 and 8

GEOG\*4150 [0.50] Sedimentary Processes

1.50 from List A

3.00 electives

#### List A

GEOG\*3620 [0.50] Desert Environments  
 GEOG\*4250 [0.50] Coastal Processes  
 GEOG\*4690 [1.00] Geography Field Research  
 GEOL\*3060 [0.50] Groundwater  
 GEOL\*3090 [0.50] Applied Structural Geology  
 GEOL\*3250 [0.50] Field Methods in Geosciences  
 GEOL\*4090 [0.50] Sedimentology  
 GEOL\*4130 [0.50] Clay and Humic Chemistry  
 MET\*3050 [0.50] Microclimatology

#### Other Requirements

1. At least 1.50 credits from List A must be at the 4000 level.
2. At least 2.50 electives must be acceptable science courses.
3. At least 6.00 of all science credits must be 3000 or 4000 level, of which at least 2.00 must be at the 4000 level.

### Ecology (ECOL)

Department of Integrative Biology, College of Biological Science

The program provides a solid foundation in the principles of ecology, and further training in both pure and applied aspects of ecology. After the fourth semester, the student may choose to enter one (1) of three (3) areas of emphasis, or to design a course package that meets his/her own specific ecological interests (General Ecology). The program offers preparation for careers in conservation, resource management, ecological consulting, or nature interpretation; or for graduate training and research in fundamental ecology. This major qualifies students for post-graduate work in the environmental sciences, and provides a sound science background for students wishing to pursue careers in teaching, government service or the private sector.

### Major (Honours Program)

Students may enter this major in Semester I or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

#### Semester 1

BIOL\*1030 [0.50] Biology I  
 CHEM\*1040 [0.50] General Chemistry I  
 MATH\*1080 [0.50] Elements of Calculus I  
 PHYS\*1070 [0.50] Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

0.50 Arts or Social Science electives

### Semester 3

BIOL*2210	[0.50]	Introductory Cell Biology
STAT*2040	[0.50]	Statistics I

One of:

GEOG*1300	[0.50]	Introduction to the Biophysical Environment
GEOL*1050	[0.50]	Geology and the Environment

1.00 electives

### Semester 4

BIOC*2580	[0.50]	Introductory Biochemistry
BIOL*3110	[0.50]	Population Ecology
MBG*2000	[0.50]	Introductory Genetics

One of:

BIOL*2250	[0.50]	Biostatistics and the Life Sciences
STAT*2050	[0.50]	Statistics II

0.50 electives

### Semester 5

BIOL*3010	[0.50]	Laboratory and Field Work in Ecology
BIOL*3120	[0.50]	Community Ecology

One of:

BOT*2100	[0.50]	Life Strategies of Plants
ZOO*3200	[0.50]	Comparative Animal Physiology I

One of:

ZOO*2070	[0.50]	Invertebrate Zoology I
ZOO*2090	[0.50]	Vertebrate Structure and Function

1.00 electives

### Semester 6

One of:

MBG*3000	[0.50]	Population Genetics
ZOO*3300	[0.50]	Evolution

2.00 electives

### Semester 7

BIOL*4110	[0.75]	Ecological Methods
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1.75 electives

### Semester 8

BIOL*4120	[0.50]	Evolutionary Ecology
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2.00 electives

## Areas of Emphasis

### General Ecology (GECO)

A minimum of 3.00 credits from the area-of-emphasis-specific credits, plus 1.50 additional science credits. Of the 4.50 credits, at least 3.50 must be at the 3000 or 4000 level.

### Experimental Ecology (EECO)

ZOO*3200	[0.50]	Comparative Animal Physiology I
ZOO*4070	[0.50]	Animal Behaviour
ZOO*4170	[0.50]	Experimental Comparative Animal Physiology

0.75 credits from:

IBIO*4500	[0.75]	Research in Integrative Biology I
ZOO*4410	[0.75]	Field Ecology
ZOO*4600	[0.75]	Tropical Ecology
ZOO*4610	[0.75]	Arctic Ecology
ZOO*4700	[0.50]	Field Biology
ZOO*4710	[0.25]	Field Biology
ZOO*4800	[0.50]	Field Biology
ZOO*4810	[0.25]	Field Biology

One of the following not already successfully completed in Semester 6:

MBG*3000	[0.50]	Population Genetics
ZOO*3300	[0.50]	Evolution

1.75 additional science credits, at least 1.50 of which are at the 3000 or 4000 level

### Interpretive Ecology (IE)

ENVB*3000	[0.50]	Nature Interpretation
ZOO*4070	[0.50]	Animal Behaviour

0.75 credits from:

ZOO*4410	[0.75]	Field Ecology
ZOO*4600	[0.75]	Tropical Ecology

ZOO*4610	[0.75]	Arctic Ecology
ZOO*4700	[0.50]	Field Biology
ZOO*4710	[0.25]	Field Biology
ZOO*4800	[0.50]	Field Biology
ZOO*4810	[0.25]	Field Biology

At least 0.75 additional science credits at the 3000 or 4000 level

One of:

BIOL*3050	[0.50]	Mycology I
BOT*3710	[0.50]	Classification and Morphology of Seed Plants

One of:

ZOO*4020	[0.50]	Ichthyology
ZOO*4090	[0.50]	Ornithology
ZOO*4280	[0.50]	Mammalogy
ZOO*4430	[0.50]	Herpetology

One of:

BIOL*3450	[0.50]	Introduction to Aquatic Environments
ENVB*3110	[0.50]	Natural History of Insects

Recommended:

CHEM*3360	[0.50]	Environmental Chemistry and Toxicology
ENVB*3040	[0.50]	Natural Chemicals in the Environment
ENVB*4040	[0.50]	Behaviour of Insects
MICR*4140	[0.50]	Soil Microbiology and Biotechnology

### Resource Conservation (RC)

AGEC*2700	[0.50]	Survey of Natural Resource Economics
BIOL*3130	[0.50]	Conservation Biology
ECON*1050	[0.50]	Introductory Microeconomics
ZOO*4050	[0.50]	Natural Resources Policy

2.50 additional science credits, at least 1.50 of which are at the 3000 or 4000 level

Recommended:

BIOL*4060	[0.50]	Restoration Ecology
BIOL*4150	[0.50]	Wildlife Conservation and Management
ECON*2100	[0.50]	Economic Growth and Environmental Quality
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*4780	[0.50]	Forest Ecology
ENVS*3320	[0.50]	Principles of Landscape Ecology

## Minor (Honours Program)

A minimum of 5.00 credits is required to completed the minor, which must include:

BIOL*3010	[0.50]	Laboratory and Field Work in Ecology
BIOL*3110	[0.50]	Population Ecology
BIOL*3120	[0.50]	Community Ecology
BIOL*4110	[0.75]	Ecological Methods
BIOL*4120	[0.50]	Evolutionary Ecology

One of:

MBG*3000	[0.50]	Population Genetics
ZOO*3300	[0.50]	Evolution

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
GEOL*1050	[0.50]	Geology and the Environment

0.75 credits chosen in consultation with the faculty advisor

## Environmental Biology (ENVB)

### Department of Environmental Biology, 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 must 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. Of these 16.00 science credits, a minimum of 6.00 must be at the 3000 - and 4000-levels with a minimum of 2.00 credits at the 4000-level.

### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science elective

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming
MATH*2080	[0.50]	Elements of Calculus II
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science elective

### Semester 3

BIOC*2580	[0.50]	Introductory 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 1.50 if STAT\*2040 was taken in semester 2)

### Semester 4

BIOL*3110	[0.50]	Population Ecology
ENVB*2100	[0.50]	Problem-Solving in Environmental Biology
MBG*2000	[0.50]	Introductory 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 (at least 1.00 restricted electives must be selected, including at least one ENVB course)

### Semester 6

ENVB*3330	[0.50]	Ecosystem Processes and Applications
ZOO*3300	[0.50]	Evolution

1.50 electives or restricted electives chosen from lists A, B, C and/or D

### Semester 7

Students contemplating graduate studies are encouraged to take ENVB\*4420 and/or ENVB\*4800 in semesters 7 or 8.

2.50 electives or restricted electives chosen from lists A, B, C and/or D

### Semester 8

2.50 electives or restricted electives chosen from lists A, B, C and/or D

## Restricted Electives

Select 4.50 credits from the following lists of restricted electives during Semesters 3-8. At least 1.00 of these credits must be from ENVB courses.

Students should note that some restricted electives (marked by asterisks \*\*) require other restricted electives as prerequisites. Students should consult the most recent undergraduate calendar for specific requirements.

### List A - Environment & Agriculture

Minimum of 1.00 credits from the following list:

CROP*2110	[0.50]	Crop Ecology
CROP*2280	[0.50]	Crops in Land Reclamation
ENVB*2010	[0.50]	Food Production and the Environment
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3040	[0.50]	Natural Chemicals in the Environment
ENVB*3210	[0.50]	Plant Pathology
ENVB*4040	[0.50]	Behaviour of Insects **
ENVB*4100	[0.50]	Applied Entomology **
ENVB*4130	[0.50]	Chemical Ecology: Principles & Practice **
MICR*3220	[0.50]	Plant Microbiology
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
PBIO*4750	[0.50]	Genetic Engineering of Plants **
SOIL*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management

### List B - Impacts of Pollution on Living Organisms

Minimum of 1.00 credits from the following list:

BIOL*3450	[0.50]	Introduction to Aquatic Environments
ENVB*3010	[0.50]	Climate Change Biology
ENVB*3030	[0.50]	Pesticides and the Environment
ENVB*4240	[0.50]	Biological Activity of Pesticides
ENVB*4550	[0.50]	Ecotoxicological Risk Characterization **
GEOG*3020	[0.50]	Global Environmental Change
MBG*4270	[0.50]	DNA Replication, Recombination and Repair **
MICR*4180	[0.50]	Microbial Processes in Environmental Management
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants **
TOX*3360	[0.50]	Environmental Chemistry and Toxicology
ZOO*4350	[0.50]	Biology of Polluted Waters **
ZOO*4610	[0.75]	Arctic Ecology

## List C - Conservation of Biodiversity & Natural Resources

Minimum of 1.00 credits from the following list:

BIOL*3130	[0.50]	Conservation Biology
BIOL*4060	[0.50]	Restoration Ecology **
BIOL*4150	[0.50]	Wildlife Conservation and Management
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*3090	[0.50]	Insect Diversity and Biology
ENVB*3250	[0.50]	Forest Health and Disease
ENVB*3300	[0.50]	Applied Ecology and Environment **
ENVB*4020	[0.50]	Water Quality and Environmental Management **
ENVB*4220	[0.50]	Biology of Aquatic Insects **
ENVB*4260	[0.50]	Field Entomology **
ENVB*4270	[0.50]	Insect Biosystematics **
ENVB*4780	[0.50]	Forest Ecology **
ENVS*4220	[0.50]	Environmental Impact Assessment **
SOIL*2120	[0.50]	Introduction to Environmental Stewardship
SOIL*3050	[0.50]	Land Utilization **
SOIL*3080	[0.50]	Soil and Water Conservation **
SOIL*3100	[0.50]	Resource Planning Techniques **
ZOO*4050	[0.50]	Natural Resources Policy
ZOO*4110	[0.50]	Principles of Fish and Wild Life Management
ZOO*4600	[0.75]	Tropical Ecology

### List D - Supporting Courses

ENVB*4420	[0.50]	Problems in Environmental Biology
ENVB*4800	[0.50]	Topics in Applied Biology

The following restricted elective courses are required as prerequisites for some courses in lists A, B and C:

BIOL*3120	[0.50]	Community Ecology
BOT*2100	[0.50]	Life Strategies of Plants
MBG*2020	[0.50]	Introductory Molecular Biology
SOIL*2010	[0.50]	Soil Science

## Environmental Toxicology (ETOX)

**Interdisciplinary Program, Department of Environmental Biology, 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 must consult the Faculty Advisor.

### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives\*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 electives\*

### Semester 3

CHEM*2480	[0.50]	Analytical Chemistry I
BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
TOX*2000	[0.50]	Principles of Toxicology

0.50 electives\*

### Semester 4

BIOL*2060	[0.50]	Ecology
CHEM*2700	[0.50]	Organic Chemistry I
MBG*2020	[0.50]	Introductory Molecular Biology
STAT*2050	[0.50]	Statistics II

0.50 electives\*

### Semester 5

BOT*2100	[0.50]	Life Strategies of Plants
BIOC*3560	[0.50]	Structure and Function in Biochemistry
TOX*3300	[0.50]	Analytical Toxicology
ZOO*3200	[0.50]	Comparative Animal Physiology I

0.50 electives\*

### Semester 6

ENVB*3030	[0.50]	Pesticides and the Environment
SOIL*2010	[0.50]	Soil Science

TOX*3360	[0.50]	Environmental Chemistry and Toxicology
ZOO*4170	[0.50]	Experimental Comparative Animal Physiology

0.50 electives\*

**Semester 7**

BIOL*3450	[0.50]	Introduction to Aquatic Environments
MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
MICR*4180	[0.50]	Microbial Processes in Environmental Management
ZOO*4350	[0.50]	Biology of Polluted Waters

0.25 electives\*

**Semester 8**

PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants
STAT*3510	[0.50]	Environmental Risk Assessment
TOX*4200	[0.50]	Topics in Toxicology
TOX*4550	[0.50]	Ecotoxicological Risk Characterization

0.50 electives\*

\* a minimum of 1.50 credits must be from the College of Arts and/or the College of Social and Applied Human Sciences

**Environmental Toxicology (Co-op) (ETOX:C)**

**Interdisciplinary Program, Department of Environmental Biology, Ontario Agricultural College**

**Major (Honours Program)**

A 70% average in the science courses of semesters 1 and 2 is normally required for admission to semester 3 of this program. An optional fourth co-op work term is available.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives\*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 electives\*

**Stream A****Semester 3 - Fall**

CHEM*2480	[0.50]	Analytical Chemistry I
BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
TOX*2000	[0.50]	Principles of Toxicology

0.50 electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

CHEM*2700	[0.50]	Organic Chemistry I
SOIL*2010	[0.50]	Soil Science
STAT*2050	[0.50]	Statistics II
TOX*3360	[0.50]	Environmental Chemistry and Toxicology

0.50 electives

**Semester 5 - Fall**

BIOL*2060	[0.50]	Ecology
BIOL*3450	[0.50]	Introduction to Aquatic Environments
TOX*3300	[0.50]	Analytical Toxicology
ZOO*3200	[0.50]	Comparative Animal Physiology I

0.50 electives

**Semester 6 - Winter**

BOT*2100	[0.50]	Life Strategies of Plants
BIOC*3560	[0.50]	Structure and Function in Biochemistry
ENVB*3030	[0.50]	Pesticides and the Environment
MBG*2020	[0.50]	Introductory Molecular Biology
ZOO*4170	[0.50]	Experimental Comparative Animal Physiology

**Summer Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Fall Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 7 - Winter**

PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants
STAT*3510	[0.50]	Environmental Risk Assessment

TOX*4200	[0.50]	Topics in Toxicology
TOX*4550	[0.50]	Ecotoxicological Risk Characterization

0.50 electives

**Semester 8 - Fall**

MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
MICR*4180	[0.50]	Microbial Processes in Environmental Management
ZOO*4350	[0.50]	Biology of Polluted Waters

1.00 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 must consult the Faculty Advisor.

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

Note: CIS\*1200, rather than an Arts or Social Science credit is recommended for those needing to improve their computer skills.

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*2080	[0.50]	Elements of Calculus II
PHYS*1080	[0.50]	Physics for Life Sciences

0.50 Arts or Social Science electives

**Semester 3 - Fall**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2880	[0.50]	Physical Chemistry
FOOD*2150	[0.50]	Introduction to Nutritional and Food Science
STAT*2040	[0.50]	Statistics I

0.50 electives

**Semester 4 - Winter**

FOOD*2100	[0.50]	Communication in Food Science I
FOOD*2620	[0.50]	Food Engineering Principles
MICR*2030	[0.50]	Microbial Growth
NUTR*3210	[0.50]	Fundamentals of Nutrition

0.50 electives

**Semester 5 - Fall**

FOOD*3010	[0.50]	Food Chemistry
FOOD*3160	[0.75]	Food Processing I
FOOD*3230	[0.75]	Food Microbiology

0.50 electives

**Semester 6 - Winter**

FOOD*3020	[0.50]	Food Chemistry Laboratory
FOOD*3170	[0.50]	Food Processing II

1.50 electives

**Semester 7 - Fall**

FOOD*3260	[0.50]	Industrial Microbiology
FOOD*3700	[0.50]	Sensory Evaluation of Foods
FOOD*4120	[0.75]	Food Analysis

0.75 electives

**Semester 8 - Winter**

FOOD*4100	[0.25]	Communication in Food Science II
FOOD*4700	[0.50]	Food Product Development

1.75 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.
3. Of the 6.50 electives credits:
  - At least 2.00 must be Arts or Social Sciences.
  - At least 2.00 must be from list of Restricted Electives.
  - At least 0.5 must be from additional science electives.

**Restricted Electives:**

FOOD*4010	[0.50]	Food Plant Sanitation and Quality Control
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FOOD*4070	[0.50]	Food Packaging
FOOD*4090	[0.50]	Functional Foods and Nutraceuticals
FOOD*4110	[0.50]	Meat and Poultry Processing
FOOD*4140	[0.25]	Communication in Food Science III
FOOD*4220	[0.25]	Topics in Food Science
FOOD*4230	[0.25]	Research in Food Science I
FOOD*4240	[0.25]	Research in Food Science II
FOOD*4400	[0.50]	Dairy Processing
FOOD*4520	[0.50]	Cereal Technology
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 - Arts or Social Science electives

0.50 - Additional Science electives

2.00 - Free electives

### Minor (Honours Program)

The Minor in Food Science consists of 5.00 credits as follows:

BIOC*2580	[0.50]	Introductory Biochemistry
FOOD*3010	[0.50]	Food Chemistry
FOOD*3230	[0.75]	Food Microbiology
MICR*2030	[0.50]	Microbial Growth

One of:

FOOD*2010	[0.50]	Principles of Food Science
FOOD*2150	[0.50]	Introduction to Nutritional and Food Science
NUTR*2150	[0.50]	Introduction to Nutritional and Food Sciences

One of:

FOOD*2410	[0.50]	Introduction to Food Processing
FOOD*3160	[0.75]	Food Processing I

### Restricted Electives

Choose from the following list to bring the total to a minimum of 5.00 credits for the Minor:

FOOD*2620	[0.50]	Food Engineering Principles
FOOD*3170	[0.50]	Food Processing II
FOOD*3260	[0.50]	Industrial Microbiology
FOOD*3700	[0.50]	Sensory Evaluation of Foods
FOOD*4010	[0.50]	Food Plant Sanitation and Quality Control
FOOD*4070	[0.50]	Food Packaging
FOOD*4090	[0.50]	Functional Foods and Nutraceuticals
FOOD*4110	[0.50]	Meat and Poultry Processing
FOOD*4120	[0.75]	Food Analysis
FOOD*4400	[0.50]	Dairy Processing
FOOD*4520	[0.50]	Cereal Technology
FOOD*4700	[0.50]	Food Product Development
NUTR*3210	[0.50]	Fundamentals of Nutrition
POPM*4040	[0.50]	Epidemiology of Food-borne Diseases

### Food Science (Co-op) (FOOD:C)

Department of Food Science, Ontario Agricultural College

### Major (Honours Program)

#### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

Note: CIS\*1200, rather than an Arts or Social Science credit is recommended for those needing to improve their computer skills.

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*2080	[0.50]	Elements of Calculus II
PHYS*1080	[0.50]	Physics for Life Sciences

0.50 Arts or Social Science electives

#### Summer Semester

Off

#### Semester 3 - Fall

BIOC*2580	[0.50]	Introductory Biochemistry
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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
STAT*2040	[0.50]	Statistics I

0.50 electives

#### Semester 4 - Winter

FOOD*2100	[0.50]	Communication in Food Science I
FOOD*2620	[0.50]	Food Engineering Principles
MICR*2030	[0.50]	Microbial Growth
NUTR*3210	[0.50]	Fundamentals of Nutrition

0.50 electives

#### Summer Semester

COOP*1000	[0.00]	Co-op Work Term I
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#### Semester 5 - Fall

FOOD*3010	[0.50]	Food Chemistry
FOOD*3160	[0.75]	Food Processing I
FOOD*3230	[0.75]	Food Microbiology

0.50 electives

#### Semester 6 - Winter

FOOD*3020	[0.50]	Food Chemistry Laboratory
FOOD*3170	[0.50]	Food Processing II

1.50 electives

#### Summer Semester

Optional

#### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Winter Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Semester 7 - Fall

FOOD*3260	[0.50]	Industrial Microbiology
FOOD*3700	[0.50]	Sensory Evaluation of Foods
FOOD*4120	[0.75]	Food Analysis

0.75 electives

#### Semester 8 - Winter

FOOD*4100	[0.25]	Communication in Food Science II
FOOD*4700	[0.50]	Food Product Development

1.75 electives

#### Notes:

See Notes and Credit Summary in Food Science Major.

### Forest Science (FORS)

Department of Environmental Biology, Ontario Agricultural College

### Minor (Honours Program)

A minor in Forest Science consists of 5.00 credits from the following courses:

BOT*2050	[0.50]	Plant Ecology
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*4420	[0.50]	Problems in Environmental Biology
ENVB*4780	[0.50]	Forest Ecology
HORT*3260	[0.50]	Woody Plants

(ENVB\*4420 senior thesis topic to be arranged with faculty advisor)

Three of:

ENVB*3090	[0.50]	Insect Diversity and Biology
GEOG*3110	[0.50]	Biotic and Natural Resources
HORT*3340	[0.50]	Culture of Plants
HORT*4250	[0.50]	Nursery Production
PBIO*4100	[0.50]	Soil Plant Relationships
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants

Two of:\*

AGEC*2700	[0.50]	Survey of Natural Resource Economics
ENVB*3000	[0.50]	Nature Interpretation
GEOG*3210	[0.50]	Management of the Biophysical Environment
SOIL*3100	[0.50]	Resource Planning Techniques
ZOO*4050	[0.50]	Natural Resources Policy
ZOO*4410	[0.75]	Field Ecology

\* Resource Management majors may substitute SOIL\*4110 for ZOO\*4410

### Functional Foods and Nutraceuticals (FFAN)

Department of Human Health and Nutritional Sciences, College of Biological Science

Department of Food Science, Ontario Agricultural College.

### Minor (Honours Program)

A minor in Functional Foods and Nutraceuticals consists of 5.00 credits.

BIOC*2580	[0.50]	Introductory Biochemistry
ECON*1050	[0.50]	Introductory Microeconomics

NUTR*3210	[0.50]	Fundamentals of Nutrition
TOX*2000	[0.50]	Principles of Toxicology
One of:		
FOOD*2010	[0.50]	Principles of Food Science
FOOD*2150	[0.50]	Introduction to Nutritional and Food Science
NUTR*2150	[0.50]	Introduction to Nutritional and Food Sciences
One of:		
FOOD*4090	[0.50]	Functional Foods and Nutraceuticals
NUTR*4090	[0.50]	Functional Foods and Nutraceuticals

**2.00 Restricted Electives\***

\*restricted electives should be chosen in consultation with the Nutritional and Nutraceutical Sciences faculty advisor. Any 3000 and 4000 level courses from the following subject areas are eligible as restricted electives: Nutrition\*\*, Food Science\*\*, Biomedical Sciences\*\*, Toxicology, Population Medicine, Animal Science, Plant Biology, Human Kinetics\*\*, and Pathology.

\*\*students in these majors must select restricted electives outside of the major

**Geographic Information Systems (GIS) and Environmental Analysis****Department of Geography, College of Social and Applied Human Sciences****Minor (Honours Program)**

A minimum of 5.00 credits is required from:

GEOG*1300	[0.50]	Introduction to the Biophysical Environment
GEOG*2420	[0.50]	Aerial-photo Interpretation
GEOG*2480	[0.50]	Mapping and GIS
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*4480	[0.50]	Applied Geographic Information Systems

One of:

GEOG*2000	[0.50]	Geomorphology
GEOG*2110	[0.50]	Climate and the Biophysical Environment

One of:

GEOG*3110	[0.50]	Biotic and Natural Resources
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*3620	[0.50]	Desert Environments

And one of:

GEOG*4110	[0.50]	Environmental Systems Analysis
GEOG*4210	[0.50]	Environmental Resource Analysis

[Note: GEOG\*3110 or GEOG\*3610 is required as prerequisite for GEOG\*4110]

**Geology (GEOL)****Department of Land Resource Science, Ontario Agricultural College****Minor (Honours Program)**

A minor will consist of at least 5.00 credits in Geology. The following 7 courses are mandatory:

GEOL*1050	[0.50]	Geology and the Environment
GEOL*2020	[0.50]	Stratigraphy
GEOL*2110	[0.50]	Earth Material Science
GEOL*2150	0.75	Glacial Geology
GEOL*3090	[0.50]	Applied Structural Geology
GEOL*3120	[0.50]	Paleontology
GEOL*4090	[0.50]	Sedimentology

The remaining credits can be chosen from Geology or the Geomorphology offerings in Geography in the calendar and must be 2000 level or above.

**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, spread sheet 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 must consult the Faculty Advisor. A minimum of 20.00 credits is required.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives or restricted electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

1.00 electives or restricted electives

**Semester 3**

BIOL*2210	[0.50]	Introductory Cell Biology
BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics

1.00 electives or restricted electives

**Semester 4**

HK*2270	[0.50]	Principles of Human Biomechanics
MBG*2020	[0.50]	Introductory Molecular Biology
NUTR*3210	[0.50]	Fundamentals of Nutrition
ZOO*2100	[0.50]	Developmental Biology

0.50 electives or restricted electives

**Semester 5**

HK*3401	[0.75]	Human Anatomy
HK*3600	[0.75]	Applied Human Biology
HK*3940	[1.25]	Human Physiology

**Semester 6**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
HK*3402	[0.75]	Human Anatomy
STAT*2040	[0.50]	Statistics I

0.50 electives or restricted electives

**Semester 7**

If desired, electives or restricted electives up to a maximum of 2.75 total credits.

**Semester 8**

If desired, electives or restricted electives up to a maximum of 2.75 total credits.

**Note:** Students are required to complete 16.00 credits in acceptable science courses.

**Restricted Electives**

Students must complete 2.00 credits from Arts or Social Science courses with the recommendation that 0.50 of the 2.00 credits be in philosophy. A minimum of 2.00 credits of restricted electives is required. They are to be selected from HK\*3100, HK\*4XXX, NUTR\*4090, NUTR\*4210.

**Marine and Freshwater Biology (MFB)****Department of Integrative Biology, College of Biological Science**

The Major in Marine and Freshwater Biology provides a broad ecological perspective on aquatic environments based on the physical as well as the biological sciences. This major prepares students for post-graduate work in the aquatic sciences, and provides a sound science background 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 must consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives\*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science electives\*

**Semester 3**

ZOO*2070	[0.50]	Invertebrate Zoology I
ZOO*2090	[0.50]	Vertebrate Structure and Function
ZOO*2100	[0.50]	Developmental Biology

1.00 electives\*\*

**Semester 4**

BIOL*2210	[0.50]	Introductory Cell Biology
BIOC*2580	[0.50]	Introductory Biochemistry

MBG*2000	[0.50]	Introductory Genetics
ZOO*2080	[0.50]	Invertebrate Zoology II
0.50 electives**		
<b>Semester 5</b>		
BIOL*3110	[0.50]	Population Ecology
BIOL*3450	[0.50]	Introduction to Aquatic Environments
ZOO*3200	[0.50]	Comparative Animal Physiology I
ZOO*3300	[0.50]	Evolution

0.50 electives\*\*

**Semester 6**

BIOL*3120	[0.50]	Community Ecology
ZOO*3210	[0.50]	Comparative Animal Physiology II

1.50 electives\*\*, \*\*\*

**Semester 7**

ZOO*4350	[0.50]	Biology of Polluted Waters
ZOO*4570	[0.50]	Marine Ecological Processes

1.50 electives\*\*

**Semester 8**

IBIO*4010	[0.50]	Adaptational Physiology
ZOO*4330	[0.50]	Environmental Biology of Fishes

1.50 electives\*\*

\* CIS\*1200 is recommended for those needing to improve their computer skills

\*\* suggested electives list available from the faculty advisors

\*\*\* BIOL\*2250 is strongly recommended if independent research project courses are anticipated in semesters 7 and/or 8

**Electives - must include:**

1. A minimum of 0.75 credits from:

BIOL*4110	[0.75]	Ecological Methods
IBIO*4500	[0.75]	Research in Integrative Biology I
IBIO*4510	[0.75]	Research in Integrative Biology II
ZOO*4300	[0.75]	Marine Biology and Oceanography
ZOO*4410	[0.75]	Field Ecology
ZOO*4540	[0.50]	Marine and Freshwater Research
ZOO*4600	[0.75]	Tropical Ecology
ZOO*4610	[0.75]	Arctic Ecology
ZOO*4700	[0.50]	Field Biology
ZOO*4710	[0.25]	Field Biology
ZOO*4800	[0.50]	Field Biology
ZOO*4810	[0.25]	Field Biology

2. Other field or research courses with approval of faculty advisor.

3. At least 1.00 Arts and/or Social Science electives.

**Mathematical Science (MSCI)**

**Department of Mathematics & Statistics, College of Physical and Engineering Science  
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. This minor cannot be combined with a major in Mathematics, Statistics, or Computing and Information Science.

**Mathematics (MATH)**

**Department of Mathematics and Statistics, College of Physical and Engineering Science**

**Major (Honours Program)**

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, 2.00 of which must be at the 4000 level. At least 1.00 credits in Arts and Social Science must be completed.

**Semester 1\***

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 electives (CIS\*2500 recommended)

**Semester 3**

MATH*2000	[0.50]	Set Theory
MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science electives

**Semester 4**

MATH*2130	[0.50]	Numerical Methods
MATH*2170	[0.50]	Differential Equations I
MATH*2210	[0.50]	Advanced Calculus II

1.00 electives (CIS\*2500 recommended if not taken earlier)

**Semester 5**

MATH*3100	[0.50]	Differential Equations II
MATH*3200	[0.50]	Real Analysis

One of:

MATH*3130	[0.50]	Algebraic Structures
MATH*3240	[0.50]	Operations Research

One of:\*\*

STAT*3100	[0.50]	Introductory Mathematical Statistics I
STAT*3240	[0.50]	Applied Regression Analysis

0.50 electives

**Semester 6**

MATH*3260	[0.50]	Complex Analysis
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0.50 credits from a 3000 level statistics

0.50 credits from a 3000 or 4000 level mathematics

1.00 electives

**Semester 7**

0.50 credits from a 4000 level mathematics\*\*\*

1.50 electives

One of:

MATH*3130	[0.50]	Algebraic Structures
MATH*3240	[0.50]	Operations Research

**Semester 8**

1.00 credits from a 4000 level mathematics\*\*\*

1.50 electives

\*students may be exempted from CIS\*1500 in Semester 1 upon taking a computer science assessment of computing skills. If exempted from CIS\*1500, you are advised to take CIS\*2500 in the first semester.

\*\*a student selecting STAT\*3100 should take STAT\*3110 in semester 6

\*\*\*a mathematics major must include 2.00 or more credits at the 4000 level in mathematics (which may include STAT\*4340) and must include at least 6.00 at the 3000 or 4000 level from the program committee approved list of science electives

**Minor (Honours Program)**

A total of 5.00 credits is required to complete the Minor, including:

2.50 credits from:

(MATH\*1080 or MATH\*1200)

(MATH\*1210 or MATH\*2080)

MATH*2000	[0.50]	Set Theory
MATH*2150 or MATH*2160		

MATH\*2200 [0.50] Advanced Calculus I

0.50 Statistics (STAT\*) credits at the 2000 level or above.

2.00 additional Mathematics credits at the 2000 level or above, including 1.50 credits at the 3000 or 4000 level.

**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 or a Minor 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 must consult the Faculty Advisor. A total of 20.00 credits is required to complete the major.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

One mathematics/computer course from:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming
MATH*2080	[0.50]	Elements of Calculus II

0.50 electives

**Semester 3**

BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
MICR*2020	[0.50]	Microbial Interactions and Associations
STAT*2040	[0.50]	Statistics I

0.50 electives

**Semester 4**

BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2020	[0.50]	Introductory Molecular Biology
MICR*2030	[0.50]	Microbial Growth

1.00 electives

**Semester 5**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
MICR*3120	[0.50]	Systematic Bacteriology
MICR*3230	[0.50]	Immunology I

One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics

0.50 electives

**Semester 6**

BIOL*3050	[0.50]	Mycology I
MICR*3110	[0.50]	Techniques in Microbiology
MICR*3260	[0.50]	Microbial Adaptation and Development

1.00 electives

**Semester 7**

MICR*4120	[0.50]	Virology
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2.00 electives or restricted electives which can include MICR\*4310.

**Semester 8**

MICR*4290	[0.50]	Microbial Ecology
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2.00 electives or restricted electives which can include MICR\*4320

**Restricted Electives**

Of the 8.00 elective credits throughout the program, at least 2.00 must be from the Arts and Social Sciences. For the Major program, 1.50 must be selected from the list below and at least 2.50 must be from the list of approved science electives. (See exception for students taking a minor in an Arts or Social Science subject.) Students in the major program should ensure that at least 1.00 of the electives are 4000 level science courses.

BIOL*4050	[0.50]	Mycology II
BIOC*4540	[0.50]	Enzymology
BIOC*4580	[0.50]	Membrane Biochemistry
FOOD*3230	[0.75]	Food Microbiology
FOOD*3260	[0.50]	Industrial Microbiology
MCB*4080	[0.50]	Applied Microbiology and Biochemistry
MICR*3220	[0.50]	Plant Microbiology
MICR*4010	[0.50]	Pathogenic Bacteriology
MICR*4230	[0.50]	Immunology II
MICR*4240	[0.50]	Topics in Microbiology
MICR*4270	[0.50]	Microbial Design
MICR*4310	[1.00]	Research Project I
MICR*4320	[1.00]	Research Project II
MICR*4430	[0.50]	Medical Virology

One of:

MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4180	[0.50]	Microbial Processes in Environmental Management

**Minor (Honours Program)**

The minor in Microbiology consists of the following 5.00 credits:

2.00 credits including:

BIOC*3560	[0.50]	Structure and Function in Biochemistry
MICR*2020	[0.50]	Microbial Interactions and Associations
MICR*2030	[0.50]	Microbial Growth
MICR*3110	[0.50]	Techniques in Microbiology
2.00 credits from:		
BIOL*3050	[0.50]	Mycology I
FOOD*3230	[0.75]	Food Microbiology
FOOD*3260	[0.50]	Industrial Microbiology
MBG*2020	[0.50]	Introductory Molecular Biology
MICR*3120	[0.50]	Systematic Bacteriology
MICR*3220	[0.50]	Plant Microbiology
MICR*3230	[0.50]	Immunology I
MICR*3260	[0.50]	Microbial Adaptation and Development
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4180	[0.50]	Microbial Processes in Environmental Management

One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics

1.00 credits from:

BIOL*4050	[0.50]	Mycology II
MCB*4080	[0.50]	Applied Microbiology and Biochemistry
MICR*4010	[0.50]	Pathogenic Bacteriology
MICR*4120	[0.50]	Virology
MICR*4230	[0.50]	Immunology II
MICR*4270	[0.50]	Microbial Design
MICR*4290	[0.50]	Microbial Ecology
MICR*4430	[0.50]	Medical Virology

**Microbiology (Co-op) (MICR:C)****Department of Molecular and Cellular Biology, College of Biological Science**

Students in the Major in Microbiology program may take the Co-op option. Students do not begin their first work term until they have completed semester 3 and courses BIOL\*1030, BIOL\*1040 and MICR\*2030. Students in the co-op program must also complete COOP\*1100 in the second academic semester. At least 3 work terms (COOP\*1000, COOP\*2000, COOP\*3000) are required in the co-op program, and the course requirements are the same as shown for the major program. Some courses must be taken during a different semester than usual, and Co-op students may require an additional semester to meet all the program requirements. Students should plan their programs in consultation with the faculty advisor.

**Stream A****Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives

Students who are admitted to the Co-op Program but deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
COOP*1100	[0.00]	Introduction to Co-operative Education

One mathematics/computer course from:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming
MATH*2080	[0.50]	Elements of Calculus II

0.50 electives

**Summer Semester**

No Academic Semester or Work Term

**Semester 3 - Fall**

BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
MICR*2020	[0.50]	Microbial Interactions and Associations
MICR*2030	[0.50]	Microbial Growth

0.50 electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2020	[0.50]	Introductory Molecular Biology
STAT*2040	[0.50]	Statistics I

1.00 electives

**Semester 5 - Fall**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
MICR*3120	[0.50]	Systematic Bacteriology
MICR*3230	[0.50]	Immunology I
One of:		
MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics

0.50 electives

**Semester 6 - Winter**

BIOL*3050	[0.50]	Mycology I
MICR*3110	[0.50]	Techniques in Microbiology
MICR*3260	[0.50]	Microbial Adaptation and Development

1.00 electives

**Summer Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Fall Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 7 - Winter**

MICR*4290	[0.50]	Microbial Ecology
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2.00 electives or restricted electives which can include MICR\*4310

**Summer Semester**

COOP*4000	[0.00]	Co-op Work Term IV (optional)
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**Semester 8 - Fall**

MICR*4120	[0.50]	Virology
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2.00 electives or restricted electives which can include MICR\*4320

**Stream B****Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives

Students who are admitted to the Co-op Program but deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
COOP*1100	[0.00]	Introduction to Co-operative Education

One mathematics/computer course from:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming
MATH*2080	[0.50]	Elements of Calculus II

0.50 electives

**Summer Semester**

No Academic Semester or Work Term

**Semester 3 - Fall**

BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
MICR*2020	[0.50]	Microbial Interactions and Associations
MICR*2030	[0.50]	Microbial Growth

0.50 electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2020	[0.50]	Introductory Molecular Biology
STAT*2040	[0.50]	Statistics I

1.00 electives

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

BIOL*3050	[0.50]	Mycology I
BIOC*3560	[0.50]	Structure and Function in Biochemistry
MICR*3110	[0.50]	Techniques in Microbiology

1.00 electives

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

MICR*3120	[0.50]	Systematic Bacteriology
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MICR*3230	[0.50]	Immunology I
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One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics

1.00 electives

**Semester 7 - Winter**

MICR*3260	[0.50]	Microbial Adaptation and Development
MICR*4290	[0.50]	Microbial Ecology

1.50 electives or restricted electives which can include MICR\*4310

**Summer Semester**

COOP*4000	[0.00]	Co-op Work Term IV (optional)
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**Semester 8 - Fall**

MICR*4120	[0.50]	Virology
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2.00 electives or restricted electives which can include MICR\*4320

**Restricted Electives**

Of the 8.00 elective credits throughout the program, at least 2.00 must be from the Arts and Social Sciences. For the Major program, 1.50 must be selected from the list below and at least 2.50 must be from the list of approved science electives. (See exception for students taking a minor in an Arts or Social Science subject.) Students in the major program should ensure that at least 1.00 of the electives are 4000 level science courses.

BIOL*4050	[0.50]	Mycology II
BIOC*4540	[0.50]	Enzymology
BIOC*4580	[0.50]	Membrane Biochemistry
FOOD*3230	[0.75]	Food Microbiology
FOOD*3260	[0.50]	Industrial Microbiology
MCB*4080	[0.50]	Applied Microbiology and Biochemistry
MICR*3220	[0.50]	Plant Microbiology
MICR*4010	[0.50]	Pathogenic Bacteriology
MICR*4230	[0.50]	Immunology II
MICR*4240	[0.50]	Topics in Microbiology
MICR*4270	[0.50]	Microbial Design
MICR*4310	[1.00]	Research Project I
MICR*4320	[1.00]	Research Project II
MICR*4430	[0.50]	Medical Virology

One of:

MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4180	[0.50]	Microbial Processes in Environmental Management

**Molecular Biology and Genetics (MBG)****Department of Molecular and Cellular Biology, College of Biological Science**

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 departmental 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 must consult the Faculty Advisor.

**Major (Honours Program)**

A total of 20.00 credits is required to complete the major.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I

One of:

PHYS*1000	[0.50]	An Introduction to Mechanics
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

One of:

MATH*1080	[0.50]	Elements of Calculus I
MATH*1200	[0.50]	Calculus I

0.50 electives or restricted electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

One of:

PHYS*1010	[0.50]	Introductory Electricity and Magnetism
PHYS*1080	[0.50]	Physics for Life Sciences

0.50 electives or restricted electives

**Semester 3**

BIOL*2210	[0.50]	Introductory Cell Biology
BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
STAT*2040	[0.50]	Statistics I

0.50 electives or restricted electives

**Semester 4**

MBG*2020	[0.50]	Introductory Molecular Biology
MICR*2030	[0.50]	Microbial Growth
STAT*2050	[0.50]	Statistics II

1.00 electives or restricted electives

**Semester 5**

MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
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1.75 electives or restricted electives

**Semester 6**

2.50 electives or restricted electives

**Semester 7\***

MBG*4500	[1.00]	Research Project in Molecular Biology and Genetics I
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1.50 electives or restricted electives

**Semester 8\***

MBG*4510	[1.00]	Research Project in Molecular Biology and Genetics II
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1.50 electives or restricted electives

\*instead of the 2 semester sequence of MBG\*4500 / MBG\*4510 students may choose to take MBG\*4600 and 1.50 subject area electives

**Note:** Students are reminded that AT LEAST 2.00 credits must be at the 4000 level in order to complete the major.

**Restricted Electives**

## 1. Ecology Elective - 0.50 credits

BIOL*2060	[0.50]	Ecology
BIOL*3110	[0.50]	Population Ecology
BOT*2050	[0.50]	Plant Ecology
MICR*4290	[0.50]	Microbial Ecology

## 2. Arts and Social Science Electives - 2.00 credits

## 3. Physiology Elective - 0.50 credits

BIOM*3100	[0.50]	Mammalian Physiology I
BOT*3310	[0.50]	Plant Growth and Development
HK*3940	[1.25]	Human Physiology
ZOO*3200	[0.50]	Comparative Animal Physiology I

## 4. Subject Area Electives - 3.00 credits (4.50 if MBG\*4600 is taken instead of MBG\*4500 and MBG\*4510)

BIOC*3560	[0.50]	Structure and Function in Biochemistry
BIOL*3300	[0.50]	Applied Bioinformatics
MBG*3000	[0.50]	Population Genetics
MBG*3050	[0.50]	Human Genetics
MBG*3060	[0.50]	Quantitative Genetics
MBG*3200	[0.50]	Genetics: Our Uncertain Heritage
MBG*3360	[0.75]	Laboratory Methods in Molecular Biology II
MBG*3600	[0.25]	Introduction to Genomics
MBG*4030	[0.50]	Animal Breeding Methods
MBG*4080	[0.50]	Molecular Genetics
MBG*4160	[0.50]	Plant Breeding
MBG*4200	[0.50]	Transmission Genetics
MBG*4240	[0.50]	Applied Molecular Genetics
MBG*4270	[0.50]	DNA Replication, Recombination and Repair
MCB*4010	[0.50]	Advanced Cell Biology
MCB*4050	[0.50]	Protein and Nucleic Acid Structure
MICR*4120	[0.50]	Virology

One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics

One of:

MBG*4040	[0.50]	Genetics and Molecular Biology of Development
MBG*4070	[0.50]	Genetics and Molecular Biology of Development

**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:

MBG*2000	[0.50]	Introductory Genetics
MBG*2020	[0.50]	Introductory Molecular Biology

4.00 credits from:

BIOC*3560	[0.50]	Structure and Function in Biochemistry
BIOL*3300	[0.50]	Applied Bioinformatics
MBG*3000	[0.50]	Population Genetics
MBG*3050	[0.50]	Human Genetics

MBG*3060	[0.50]	Quantitative Genetics
MBG*3200	[0.50]	Genetics: Our Uncertain Heritage
MBG*3600	[0.25]	Introduction to Genomics
MBG*4030	[0.50]	Animal Breeding Methods
MBG*4080	[0.50]	Molecular Genetics
MBG*4160	[0.50]	Plant Breeding
MBG*4200	[0.50]	Transmission Genetics
MBG*4240	[0.50]	Applied Molecular Genetics
MBG*4270	[0.50]	DNA Replication, Recombination and Repair
MCB*4010	[0.50]	Advanced Cell Biology
MCB*4050	[0.50]	Protein and Nucleic Acid Structure
MICR*4120	[0.50]	Virology

One of:

MBG*3070	[0.50]	Bacterial Genetics
MBG*3080	[0.50]	Bacterial Genetics

One of:

MBG*4040	[0.50]	Genetics and Molecular Biology of Development
MBG*4070	[0.50]	Genetics and Molecular Biology of Development

**Neuroscience (NEUR)****Department of Human Health and Nutritional Sciences, College of Biological Science****Minor (Honours Program)**

A minor in Neuroscience shall include a minimum of 5.00 credits including:

BIOM*3000	[0.50]	Mammalian Neuroanatomy
CIS*1500	[0.50]	Introduction to Programming
PHYS*2030	[0.50]	Biophysics of Excitable Cells
PSYC*2410	[0.50]	Behavioural Neuroscience I
ZOO*2100	[0.50]	Developmental Biology

and at least 0.50 from:

BIOM*3100	[0.50]	Mammalian Physiology I
HK*3940	[1.25]	Human Physiology
ZOO*3200	[0.50]	Comparative Animal Physiology I

and 1.00 from an independent study project in the neurosciences, selected from a combination of:

BIOM*4510	[1.00]	Research in Biomedical Sciences II
BIOM*4521/2	[1.00]	Research in Biomedical Sciences II
HK*4230	[0.50]	Advanced Study in Human Biology and Nutritional Sciences
HK*4360	[1.00]	Research in Human Biology and Nutritional Sciences
HK*4371/2	[1.00]	Research in Human Biology and Nutritional Sciences II
IBIO*4500	[0.75]	Research in Integrative Biology I

and 1.00 from:

BIOM*3090	[0.50]	Principles of Pharmacology and Toxicology
HK*3100	[0.50]	Neuromuscular Physiology
NUTR*3210	[0.50]	Fundamentals of Nutrition
PATH*3610	[0.50]	Principles of Disease
PSYC*2390	[0.50]	Principles of Sensation and Perception
PSYC*3030	[0.50]	Neurochemical Basis of Behaviour
PSYC*3040	[0.50]	Current Issues in Neuropsychology
PSYC*3410	[0.50]	Behavioural Neuroscience II
ZOO*4470	[0.50]	Comparative Endocrinology

**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, spread sheet 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 I or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. A total of 20.00 credits is required, including 2.00 credits from Arts and Social Sciences courses.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 electives or restricted electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
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CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
1.00 electives or restricted electives		

**Semester 3**

BIOL*2210	[0.50]	Introductory Cell Biology
BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics

1.00 electives

**Semester 4**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
MBG*2020	[0.50]	Introductory Molecular Biology
NUTR*3210	[0.50]	Fundamentals of Nutrition
STAT*2040	[0.50]	Statistics I

0.50 electives or restricted electives

**Semester 5**

HK*3940	[1.25]	Human Physiology
NUTR*3330	[0.50]	Micronutrients, Phytochemicals and Health
NUTR*3390	[0.50]	Applied Nutritional and Nutraceutical Sciences I

0.25 or 0.50 electives or restricted electives

**Semester 6**

BIOM*3090	[0.50]	Principles of Pharmacology and Toxicology
NUTR*4090	[0.50]	Functional Foods and Nutraceuticals
NUTR*4330	[0.50]	Applied Nutritional and Nutraceutical Sciences II
PATH*3610	[0.50]	Principles of Disease

0.50 electives or restricted electives

**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**

Students must complete 2.00 credits from Arts and Social Sciences courses and 1.00 credits from among the following:

HK*4410	[0.50]	Research Concepts
HK*4420	[0.50]	Research Modules
HK*4460	[0.50]	Regulation of Human Metabolism
NUTR*4200	[0.50]	Nutrition and Immune Function
NUTR*4320	[0.50]	Nutrition and Metabolic Control of Disease
NUTR*4360	[0.50]	Current Issues in Nutrigenomics

**Nutritional Sciences (NSCI)****Department of Human Health and Nutritional Sciences, College of Biological Science****Minor (Honours Program)**

A minor in Nutritional Sciences requires 5.00 credits as follows:

BIOC*2580	[0.50]	Introductory Biochemistry
NUTR*2150	[0.50]	Introduction to Nutritional and Food Sciences
NUTR*3210	[0.50]	Fundamentals of Nutrition
NUTR*3330	[0.50]	Micronutrients, Phytochemicals and Health
STAT*2040	[0.50]	Statistics I

At least 0.50 credits from:

BIOM*3100	[0.50]	Mammalian Physiology I
HK*3940	[1.25]	Human Physiology
ZOO*3200	[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*4160	[0.25]	Beef Cattle Nutrition
ANSC*4170	[0.25]	Dairy Cattle Nutrition
ANSC*4180	[0.25]	Poultry Nutrition
ANSC*4190	[0.25]	Swine Nutrition
ANSC*4500	[0.25]	Horse Nutrition
ANSC*4510	[0.25]	Pet Nutrition
HK*4230	[0.50]	Advanced Study in Human Biology and Nutritional Sciences
HK*4360	[1.00]	Research in Human Biology and Nutritional Sciences
HK*4371/2	[1.00]	Research in Human Biology and Nutritional Sciences II
NUTR*3390	[0.50]	Applied Nutritional and Nutraceutical Sciences I
NUTR*4090	[0.50]	Functional Foods and Nutraceuticals
NUTR*4200	[0.50]	Nutrition and Immune Function
NUTR*4210	[0.50]	Nutrition, Exercise and Energy Metabolism
NUTR*4320	[0.50]	Nutrition and Metabolic Control of Disease
NUTR*4360	[0.50]	Current Issues in Nutrigenomics
NUTR*4510	[0.50]	Toxicology, Nutrition and Food

**Physical Science (PSCI)****College of Physical and Engineering Science****Major (Honours Program)**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must 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\*1030, BIOL\*1040)

1.00 - Chemistry (CHEM\*1040, CHEM\*1050)

1.00 - Physics [(PHYS\*1000, PHYS\*1010) or (PHYS\*1070, PHYS\*1080) or (PHYS\*1080, PHYS\*1130)]

1.00 - Mathematical Science [(MATH\*1080, MATH\*2080) or (MATH\*1200, MATH\*1210)]

**2. Subject Area Core - 8.00 credits**

0.50 (STAT\*2040 or STAT\*2100 )

0.50 (CIS\*1200 or 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. Arts and Social Science Electives - 2.00**

2.00 acceptable Arts or Social Science 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**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I

One of:

PHYS*1000	[0.50]	An Introduction to Mechanics
PHYS*1070	[0.50]	Introductory Physics for Life Sciences
PHYS*1080	[0.50]	Physics for Life Sciences

One of:

MATH*1080	[0.50]	Elements of Calculus I
MATH*1200	[0.50]	Calculus I

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
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
PHYS*1130	[0.50]	Physics with Applications

One of:

MATH*1210	[0.50]	Calculus II
MATH*2080	[0.50]	Elements of Calculus II

0.50 Arts or Social Science 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*1500	[0.50]	Introduction to Programming

OR

STAT*2040	[0.50]	Statistics I
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**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*1500	[0.50]	Introduction to Programming

(if a statistics course is chosen in Semester 3)

OR

STAT*2040	[0.50]	Statistics I
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(if a computing 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 Dean's Office, College of Physical and Engineering Science and on the world wide web at [http://www.cpes.uoguelph.ca/BSc/approved\\_electives.htm](http://www.cpes.uoguelph.ca/BSc/approved_electives.htm)

### 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 Physical and Engineering Science

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must 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 21.25 credits. At least 1.00 of these credits must be obtained from the completion of Arts and/or Social Science courses.

##### Semester 1\*

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

##### Semester 2\*

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

0.50 Arts or Social Science electives

\* students who have taken physics courses other than PHYS\*1000 in Semester 1 and PHYS\*1010 in Semester 2, may proceed to semester 3 with the permission of the Department of Physics

##### Semester 3

MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I

One of:

STAT*2040	[0.50]	Statistics I
0.50 Arts electives		
0.50 Social Science electives		

##### Semester 4

MATH*2170	[0.50]	Differential Equations I
PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
PHYS*2450	[0.75]	Mechanics II
PHYS*2470	[0.75]	Electricity and Magnetism II

One of:

STAT*2040	[0.50]	Statistics I
STAT*2120	[0.50]	Probability and Statistics for Engineers
0.50 electives		

##### Semester 5

MATH*3100	[0.50]	Differential Equations II
PHYS*3100	[0.75]	Electronics
PHYS*3230	[0.50]	Quantum Mechanics I
PHYS*3240	[0.50]	Statistical Physics I

One of:

MATH*2000	[0.50]	Set Theory
0.50 electives		

##### Semester 6

PHYS*3220	[0.50]	Waves and Optics
PHYS*3400	[0.50]	Advanced Mechanics
PHYS*3510	[0.50]	Intermediate Laboratory
PHYS*4040	[0.50]	Quantum Mechanics II

One of:

MATH*3170	[0.50]	Partial Differential Equations and Special Functions
MATH*3260	[0.50]	Complex Analysis
0.50 electives		

##### Semester 7+

PHYS*4180	[0.50]	Advanced Electromagnetic Theory
PHYS*4500	[0.50]	Advanced Physics Laboratory

One of:

PHYS*4240	[0.50]	Statistical Physics II
0.50 electives		
1.00 electives **		

##### Semester 8+

PHYS*4510	[0.50]	Advanced Physics Project
2.00 electives **		

+ students going on to graduate school in physics should take PHYS\*4120, PHYS\*4130, PHYS\*4150, PHYS\*4240

\*\* For the electives chosen in Sem 7 and 8, at least 1.50 credits must be from lists A and B below. At least 1.00 credits must be from list A. Substitutions of courses in list B by other 3000 or 4000 level courses must be approved by the Physics Faculty Advisor.

##### List A

PHYS*4120	[0.50]	Atomic and Molecular Physics
PHYS*4130	[0.50]	Subatomic Physics
PHYS*4150	[0.50]	Solid State Physics

##### List B

GEOL*3060	[0.50]	Groundwater
PHYS*4540	[0.50]	Molecular Biophysics
PHYS*4560	[0.50]	Biophysical Methods
PHYS*4910	[0.50]	Advanced Topics in Physics I
PHYS*4920	[0.50]	Advanced Topics in Physics II
PHYS*4930	[0.50]	Advanced Topics in Physics III
POLS*3370	[0.50]	Environmental Policy Formation and Administration
REXT*3100	[0.50]	Teaching and Learning in Non-Formal Education
SOIL*3600	[0.50]	Remote Sensing
STAT*3240	[0.50]	Applied Regression Analysis
STAT*3510	[0.50]	Environmental Risk Assessment

#### Minor (Honours Program)

A minor in Physics requires 5.00 credits in physics courses including at least 1.00 at the 3000 or 4000 level.

The following four courses, with a weight of 0.75 each, are required:

PHYS*2440	[0.75]	Mechanics I
PHYS*2450	[0.75]	Mechanics II
PHYS*2460	[0.75]	Electricity and Magnetism I
PHYS*2470	[0.75]	Electricity and Magnetism II

The following courses are strongly recommended:

PHYS*1000	[0.50]	An Introduction to Mechanics
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

### Physics (Co-op) (PHYS:C)

#### Department of Physics, College of Physical and Engineering Science

Since some of the required courses are not offered every semester, students entering the Major in Physics (Co-op) should plan their program in consultation with the Department of Physics Faculty Advisor. To graduate from the Co-op program a minimum of 4 successfully completed work terms (COOP\*1000, COOP\*2000, COOP\*3000, COOP\*4000) is normally required.

#### Major (Honours Program)

This major requires the completion of 21.25 credits.

##### Semester 1 - Fall

The program for the first semester is the same as the Major in Physics (regular) program.

##### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism

One of:

CIS*2500	[0.50]	Intermediate Programming
0.50 Arts or Social Science electives*		

##### Semester 3 - Fall

MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I

One of:

MATH*2000	[0.50]	Set Theory
STAT*2040	[0.50]	Statistics I
0.50 Arts or Social Science electives*		

**Winter Semester**

COOP\*1000 [0.00] Co-op Work Term I

**Semester 4 - Summer**

MATH\*2170 [0.50] Differential Equations I  
 PHYS\*2260 [0.50] Experimental Basis of Quantum Physics  
 PHYS\*3240 [0.50] Statistical Physics I

One of:

CIS\*2520 [0.50] Data Structures

0.50 electives\*

0.50 electives\*

**Fall Semester**

COOP\*2000 [0.00] Co-op Work Term II

**Semester 5 - Winter**

PHYS\*2450 [0.75] Mechanics II  
 PHYS\*2470 [0.75] Electricity and Magnetism II  
 PHYS\*3220 [0.50] Waves and Optics

One of:

STAT\*2040 [0.50] Statistics I

STAT\*2120 [0.50] Probability and Statistics for Engineers

MATH\*3260 [0.50] Complex Analysis

0.50 electives

0.50 electives

**Summer Semester**

COOP\*3000 [0.00] Co-op Work Term III

**Semester 6 - Fall +**

MATH\*3100 [0.50] Differential Equations II  
 PHYS\*3100 [0.75] Electronics  
 PHYS\*3230 [0.50] Quantum Mechanics I

1.00 electives \*\*

**Semester 7 - Winter +**

PHYS\*3400 [0.50] Advanced Mechanics  
 PHYS\*3510 [0.50] Intermediate Laboratory  
 PHYS\*4040 [0.50] Quantum Mechanics II

One of:

MATH\*3170 [0.50] Partial Differential Equations and Special Functions

0.50 electives\*\*

0.50 electives\*\*

**Summer Semester**

COOP\*4000 [0.00] Co-op Work Term IV

**Semester 8 - Fall +**

PHYS\*4180 [0.50] Advanced Electromagnetic Theory  
 PHYS\*4240 or 0.50 electives  
 PHYS\*4500 [0.50] Advanced Physics Laboratory

1.00 electives\*\*

\* 1.00 must be taken as Arts or Social Science electives in this Major

+ and \*\* refer to the notes in the Major in Physics program

**Plant Biology (PBIO)****Department of Integrative Biology, College of Biological Science****Department of Environmental Biology, Ontario Agricultural College****Department of Plant Agriculture, Ontario Agricultural College****Major (Honours Program)**

Students may enter this major in Semester I or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor.

**Semester 1**

BIOL\*1030 [0.50] Biology I  
 CHEM\*1040 [0.50] General Chemistry I  
 MATH\*1080 [0.50] Elements of Calculus I  
 PHYS\*1070 [0.50] Introductory Physics for Life Sciences

0.50 Arts or Social Science electives \*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL\*1040 [0.50] Biology II  
 CHEM\*1050 [0.50] General Chemistry II  
 PHYS\*1080 [0.50] Physics for Life Sciences

One of:

CIS\*1200 [0.50] Introduction to Computing

CIS\*1500 [0.50] Introduction to Programming

MATH\*2080 [0.50] Elements of Calculus II

0.50 Arts or Social Science electives\*

**Semester 3**

AGR\*2470 [0.50] Introduction to Plant Agriculture  
 BOT\*2100 [0.50] Life Strategies of Plants  
 BIOC\*2580 [0.50] Introductory Biochemistry  
 MBG\*2000 [0.50] Introductory Genetics

One of:

0.50 electives

0.50 Arts and Social Science electives

**Semester 4**

BIOL\*2210 [0.50] Introductory Cell Biology  
 BOT\*3310 [0.50] Plant Growth and Development  
 ENVB\*2040 [0.50] Plant Health and the Environment  
 MBG\*2020 [0.50] Introductory Molecular Biology

One of:

0.50 electives

0.50 Arts and Social Science electives

**Semester 5**

BOT\*3410 [0.50] Plant Anatomy  
 STAT\*2040 [0.50] Statistics I

0.50 Arts or Social Science electives

1.00 electives \*\*

**Semester 6**

BOT\*3710 [0.50] Classification and Morphology of Seed Plants

2.00 electives \*\*

**Semester 7**

2.50 electives \*\*

**Semester 8**

BOT\*4380 [0.50] Metabolism in the Whole Life of Plants

2.00 electives \*\*

\* it is recommended that 0.50 Arts or Social Science electives be chosen from:

ECON\*1100 [0.50] Introductory Macroeconomics  
 ENGL\*1200 [0.50] Reading the Contemporary World  
 GEOG\*1220 [0.50] Human Impact on the Environment  
 HIST\*1250 [0.50] Science and Society Since 1500  
 PHIL\*1000 [0.50] Introductory Philosophy: Major Texts  
 POLS\*1400 [0.50] Issues in Canadian Politics  
 PSYC\*1100 [0.50] Principles of Behaviour

**Electives\*\***

1. One of:

BIOL\*2060 [0.50] Ecology  
 BOT\*2050 [0.50] Plant Ecology  
 CROP\*2110 [0.50] Crop Ecology

2. A minimum of 2.50 credits must be from the following list of preferred electives:

BIOL\*3300 [0.50] Applied Bioinformatics  
 MBG\*4300 [0.50] Plant Molecular Genetics  
 PBIO\*3110 [0.50] Crop Physiology  
 PBIO\*3750 [0.50] Plant Tissue Culture  
 PBIO\*4000 [0.50] Molecular and Cellular Aspects of Plant-Microbe Interactions  
 PBIO\*4100 [0.50] Soil Plant Relationships  
 PBIO\*4150 [0.50] Molecular and Cellular Aspects of Plant Development  
 PBIO\*4530 [0.50] Environmental Pollution Stresses on Plants  
 PBIO\*4600 [0.75] Plant Environment Interaction and Stress Physiology  
 PBIO\*4750 [0.50] Genetic Engineering of Plants

3. A minimum of 3.00 credits must be from the following list:

BIOL\*3050 [0.50] Mycology I  
 CROP\*3300 [0.50] Grain Crops  
 CROP\*3310 [0.50] Protein and Oilseed Crops  
 CROP\*3330 [0.50] Forage Crops: Science and Technology  
 CROP\*4240 [0.50] Weed Science  
 ENVB\*2030 [0.50] Current Issues in Forest Science  
 ENVB\*3210 [0.50] Plant Pathology  
 ENVB\*4000 [0.50] Plant Disease Management  
 ENVB\*4070 [0.50] Biological and Cultural Control of Plant Diseases  
 ENVB\*4420 [0.50] Problems in Environmental Biology  
 ENVB\*4780 [0.50] Forest Ecology  
 HORT\*3010 [0.50] Annual, Perennial and Indoor Plants - Identification and Use  
 HORT\*3230 [0.50] Plant Propagation  
 HORT\*3260 [0.50] Woody Plants  
 HORT\*3340 [0.50] Culture of Plants  
 HORT\*4300 [0.50] Postharvest Physiology  
 HORT\*4420 [0.50] Fruit Crops  
 IBIO\*4500 [0.75] Research in Integrative Biology I

IBIO*4510	[0.75]	Research in Integrative Biology II
MBG*3000	[0.50]	Population Genetics
MBG*3100	[0.50]	Plant Genetics
MBG*4160	[0.50]	Plant Breeding
MICR*3220	[0.50]	Plant Microbiology

4. 1.50 Arts and Social Science electives.

5. A minimum of 6.00 science credits must be completed at the 3000 and 4000 levels with a minimum 2.00 credits at the 4000 level.

### Minor (Honours Program)

A minor in Plant Biology requires 5.00 credits in the Plant Biology program chosen in consultation with the faculty advisor. The courses will include:

BOT*3310	[0.50]	Plant Growth and Development
BOT*4380	[0.50]	Metabolism in the Whole Life of Plants
ENVB*2040	[0.50]	Plant Health and the Environment

One of:

AGR*2470	[0.50]	Introduction to Plant Agriculture
BOT*2100	[0.50]	Life Strategies of Plants

One of:

BOT*3410	[0.50]	Plant Anatomy
BOT*3710	[0.50]	Classification and Morphology of Seed Plants

One of:

BIOL*2060	[0.50]	Ecology
BOT*2050	[0.50]	Plant Ecology
CROP*2110	[0.50]	Crop Ecology

2.00 credits from list of preferred electives in PBIO Major.

### Plant Biotechnology (PBTC)

**Department of Molecular and Cellular Biology, College of Biological Sciences**

**Department of Environmental Biology, Ontario Agricultural College**

**Department of Plant Agriculture, 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 must consult the Faculty Advisor.

#### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

#### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

0.50 Arts or Social Science electives

#### Semester 3

BIOL*2210	[0.50]	Introductory Cell Biology
BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics

One of:

AGR*2470	[0.50]	Introduction to Plant Agriculture
BOT*2100	[0.50]	Life Strategies of Plants

0.50 electives or restricted electives

#### Semester 4

BOT*3310	[0.50]	Plant Growth and Development
MBG*2020	[0.50]	Introductory Molecular Biology
MICR*2030	[0.50]	Microbial Growth
STAT*2040	[0.50]	Statistics I

0.50 electives or restricted electives

#### Semester 5

MBG*3100	[0.50]	Plant Genetics
PBIO*3750	[0.50]	Plant Tissue Culture

1.50 electives or restricted electives

#### Semester 6

MBG*3350	[0.75]	Laboratory Methods in Molecular Biology I
MBG*4300	[0.50]	Plant Molecular Genetics

One of:

PBIO*4150	[0.50]	Molecular and Cellular Aspects of Plant Development
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PBIO*4750	[0.50]	Genetic Engineering of Plants
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0.75 electives or restricted electives

#### Semester 7

PBIO*4000	[0.50]	Molecular and Cellular Aspects of Plant-Microbe Interactions
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PBIO*4300	[1.00]	Research Opportunities in Plant Biotechnology I
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1.00 electives or restricted electives

#### Semester 8

BOT*4380	[0.50]	Metabolism in the Whole Life of Plants
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One of:

PBIO*4150	[0.50]	Molecular and Cellular Aspects of Plant Development
PBIO*4750	[0.50]	Genetic Engineering of Plants

1.50 electives or restricted electives

### Restricted Electives

#### List A

A minimum of 2.00 credits must be taken from the following list:

BIOL*3300	[0.50]	Applied Bioinformatics
BOT*3410	[0.50]	Plant Anatomy
MBG*3200	[0.50]	Genetics: Our Uncertain Heritage
MBG*3600	[0.25]	Introduction to Genomics
MCB*4010	[0.50]	Advanced Cell Biology
MCB*4050	[0.50]	Protein and Nucleic Acid Structure
MICR*3220	[0.50]	Plant Microbiology
MICR*3230	[0.50]	Immunology I
MICR*4120	[0.50]	Virology
MICR*4230	[0.50]	Immunology II
PBIO*3110	[0.50]	Crop Physiology
PBIO*4310	[1.00]	Research Opportunities in Plant Biotechnology II
PBIO*4600	[0.50]	Plant Environment Interaction and Stress

Note: Students are strongly recommended to take PBIO\*4310.

#### List B

A minimum of 1.00 credits must be taken from the following list:

CROP*2110	[0.50]	Crop Ecology
CROP*3300	[0.50]	Grain Crops
CROP*3310	[0.50]	Protein and Oilseed Crops
ENVB*3210	[0.50]	Plant Pathology
HORT*3230	[0.50]	Plant Propagation
HORT*4300	[0.50]	Postharvest Physiology
HORT*4420	[0.50]	Fruit Crops
MBG*4160	[0.50]	Plant Breeding

### Minor (Honours Program)

A minor in Plant Biotechnology requires 5.00 credits in the Plant Biotechnology Program chosen in consultation with the Faculty Advisor. The courses include:

MBG*2020	[0.50]	Introductory Molecular Biology
PBIO*3750	[0.50]	Plant Tissue Culture
PBIO*4750	[0.50]	Genetic Engineering of Plants

One of:

AGR*2470	[0.50]	Introduction to Plant Agriculture
BOT*2100	[0.50]	Life Strategies of Plants

1.50 credits from Restricted Electives List A (listed under Major above)

0.50 credits from Restricted Electives List B (listed under Major above)

1.00 credits from the following courses:

BOT*3310	[0.50]	Plant Growth and Development
BOT*4380	[0.50]	Metabolism in the Whole Life of Plants
MBG*3100	[0.50]	Plant Genetics
MBG*4300	[0.50]	Plant Molecular Genetics
PBIO*4000	[0.50]	Molecular and Cellular Aspects of Plant-Microbe Interactions

PBIO*4150	[0.50]	Molecular and Cellular Aspects of Plant Development
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### Psychology (PSYC)

**Department of Psychology, College of Social and Applied Human Sciences**

The B.Sc. Major in Psychology offers an opportunity for students to develop interests within learning, perception, cognition, and physiological psychology from a sound base in physical and biological sciences. Students primarily interested in other areas within psychology should consult the schedule of studies for the Bachelor of Arts program. Psychology courses in the above focuses may also be studied via the B.A. program.

### Note on Honours Courses

Courses marked (H) are designed for students in a psychology honours program, the Information Systems and Human Behaviour program, the Developmental Psychology Minor program, the Educational Psychology Minor program, the Organizational Behaviour Minor program, the Social Psychology program, the Cognitive Neuropsychology Minor program, or Human Resources Management major of the Bachelor of Commerce program. Students in other programs wishing to take these courses must obtain the permission of

the instructors concerned. Unless otherwise specified, all other courses may be taken by general, honours, and students from other programs, providing the prerequisites are met.

**Courses designated with (H) are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology, or registration in either the HRM Major or ISHB Major.**

## Major (Honours Program)

### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

One of: \*

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

One of: \*

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour

### Semester 3

One of:

PSYC*2330	[0.50]	Principles of Learning
PSYC*2410	[0.50]	Behavioural Neuroscience I

One of:

PSYC*2390	[0.50]	Principles of Sensation and Perception
PSYC*2650	[0.50]	Cognitive Psychology

One of:

PSYC*2010	[0.50]	Quantification in Psychology
STAT*2040	[0.50]	Statistics I

1.00 electives \*\*

### Semester 4

PSYC*2360	[0.50]	Introductory Research Methods
PSYC*3320	[0.50]	Statistical Principles in Psychological Research

0.50 Psychology core (PSYC\*2330, PSYC\*2390, PSYC\*2410, PSYC\*2650)

0.50 electives\*\*

One of:

PSYC*2310	[0.50]	Introduction to Social Psychology
PSYC*2450	[0.50]	Introduction to Developmental Psychology
PSYC*2740	[0.50]	Personality

### Semester 5

PSYC*3370	[0.50]	Experimental Design and Analysis
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2.00 electives \*\*

### Semester 6

PSYC*3250	[0.50]	Psychological Measurement
PSYC*3380	[0.50]	Non-experimental Research Methods

1.50 electives \*\*

### Semester 7\*\*\*

2.50 electives \*\*

### Semester 8\*\*\*

2.50 electives\*\*

\* PSYC\*1100 should be completed prior to semester 3, PSYC\*1200 prior to semester 4

\*\* Electives in semester 3-8 must satisfy the following requirements:

- 1.00 arts and/or non-psychology social science credits
- 4 credits at the 3000 level
- 2 credits at the 4000 level
- 3.5 Psychology B.Sc. elective credits from List A
- 3.5 Non-psychology B.Sc. elective credits (suitable course prefixes are provided in List B)

\*\*\* students planning to enter a graduate program in Psychology are advised to complete PSYC\*4870 and PSYC\*4880 in Semesters 7 and 8, respectively. Note that PSYC\*4370 or PSYC\*4900 must be completed prior to or concurrently with either PSYC\*4870 or PSYC\*4880

**Note:** The selection of electives should take into consideration the prerequisites for preferred advanced courses. With the permission of the Psychology Department PRIOR

to course selection, up to 2 non-psychology credits can be used towards the psychology credits if such courses enhance the student's psychology program.

## List A Psychology B.Sc. Electives

PSYC*3030	[0.50]	Neurochemical Basis of Behaviour
PSYC*3040	[0.50]	Current Issues in Neuropsychology
PSYC*3100	[0.50]	Evolutionary Psychology
PSYC*3220	[0.50]	Ergonomics: the Scientific Study of People-System Relationships
PSYC*3330	[0.50]	Memory
PSYC*3340	[0.50]	Psycholinguistics
PSYC*3410	[0.50]	Behavioural Neuroscience II
PSYC*3430	[0.50]	Topics in Animal Learning and Cognition
PSYC*3850	[0.50]	Intellectual Disabilities
PSYC*4370	[0.50]	History of Psychology
PSYC*4600	[0.50]	Cognitive Neuroscience
PSYC*4750	[0.50]	Motivation
PSYC*4870	[0.50]	Honours Thesis I
PSYC*4880	[1.00]	Honours Thesis II
PSYC*4900	[0.50]	Psychology Seminar

## List B

List of Approved Science Electives Courses for B.Sc. students, excluding psychology:

Courses with the following prefixes are examples of particularly suitable science electives for students in this program: BIOL; BIOM; CIS; ENGG; ENVB; HK; MATH; STAT; ZOO; ENVB.

## Minor (Honours Program)

A minor in Psychology requires 5.00 psychology credits as follows:

PSYC*1100	[0.50]	Principles of Behaviour
PSYC*1200	[0.50]	Dynamics of Behaviour
PSYC*2360	[0.50]	Introductory Research Methods

2.00 credits from 2000 level psychology core courses selected as follows:

a. 1.50 credits from:

PSYC*2330	[0.50]	Principles of Learning
PSYC*2390	[0.50]	Principles of Sensation and Perception
PSYC*2410	[0.50]	Behavioural Neuroscience I
PSYC*2650	[0.50]	Cognitive Psychology

b. 0.50 credits from:

PSYC*2310	[0.50]	Introduction to Social Psychology
PSYC*2450	[0.50]	Introduction to Developmental Psychology
PSYC*2740	[0.50]	Personality

1.00 credits from courses in List A

One of:

PSYC*2010	[0.50]	Quantification in Psychology
STAT*2040	[0.50]	Statistics I

## Statistics (STAT)

### Department of Mathematics and Statistics, College of Physical and Engineering Science

Students in this program will acquire the ability to use modern statistical methods in a variety of applications, the theoretical understanding necessary to develop statistical methods to meet new needs and a solid preparation for further study. As well, since statistical computing is a fundamental tool for the application and development of modern statistical methods, students will develop skills in computer applications programming using such high-level languages as SAS and S-PLUS.

Students may enter this major in any semester. A student wishing to declare the major must consult the Faculty Advisor. A total of 20.00 credits is required to complete the major. Required 1000 level courses are listed under Semester 1 and Semester 2 of the recommended Schedule of Studies for Major. At least 8.00 credits in Statistics and Mathematics are required at the 2000 level or above, as follows: MATH\*2130, MATH\*2150, MATH\*2160, MATH\*2200, STAT\*2040, STAT\*2050, STAT\*3100, STAT\*3110, STAT\*3210, STAT\*3240, STAT\*3320. Five other courses (2.50 credits) in Statistics at the 3000 or 4000 level, of which at least four (2.00 credits) must be at the 4000 level. One other course (0.50 credits) in Mathematics or Statistics at the 2000 level or above.

## Recommended Schedule of Studies for Major (Honours Program)

### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism
0.50 Arts or Social Science electives*		

**Semester 3**

MATH*2200	[0.50]	Advanced Calculus I
STAT*2040	[0.50]	Statistics I

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

0.50 Arts or Social Science electives

0.50 electives\*\*

**Semester 4**

MATH*2130	[0.50]	Numerical Methods
STAT*2050	[0.50]	Statistics II

1.50 electives\*\*

**Semester 5**

STAT*3100	[0.50]	Introductory Mathematical Statistics I
STAT*3240	[0.50]	Applied Regression Analysis
STAT*3320	[0.50]	Sampling Theory with Applications

1.00 electives\*\*

**Semester 6**

STAT*3110	[0.50]	Introductory Mathematical Statistics II
STAT*3210	[0.50]	Experimental Design

1.50 electives\*\*

**Semester 7**

2.50 electives\*\*

**Semester 8**

2.50 electives\*\*

\*The recommended Arts or Social Science elective can be postponed to a future semester if the student wishes to take STAT\*2040 in Semester 2.

\*\* Electives must satisfy the following requirements:

1. Electives must include at least 2.50 credits in Statistics at the 3000 or 4000 level, and an additional 0.50 credits in Statistics or Mathematics at the 2000 level or above.
2. At least 2.00 credits in Statistics must be at the 4000 level.
3. Electives plus core courses must include at least 6.00 credits at the 3000 or 4000 level from the B.Sc. Program Committee approved list of science electives.
4. At least 1.00 credits in Arts or Social Science must be completed.

**Minor (Honours Program)**

A total of 5.00 credits in Statistics and Mathematics are required, including:

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

One of:

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2160	[0.50]	Linear Algebra I

0.50 additional credits in Statistics

0.50 additional credits in Statistics or Mathematics

**Theoretical Physics (THPY)****Department of Physics, College of Physical and Engineering Science**

Students may enter this major in Semester 1 or any semester thereafter. A student wishing to declare the major must consult the Faculty Advisor. Since some of the required courses are not offered every semester, 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 21.25 credits. At least 1.00 of these credits must be obtained from the completion of Arts and/or Social Science courses.

**Semester 1 to 3**

The program for the first three semesters is the same as the Major in Physics program.

**Semester 4**

MATH*2170	[0.50]	Differential Equations I
PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
PHYS*2450	[0.75]	Mechanics II
PHYS*2470	[0.75]	Electricity and Magnetism II

One of:\*

MATH*2210	[0.50]	Advanced Calculus II
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0.50 electives

**Semester 5**

MATH*3100	[0.50]	Differential Equations II
PHYS*3100	[0.75]	Electronics
PHYS*3230	[0.50]	Quantum Mechanics I
PHYS*3240	[0.50]	Statistical Physics I

One of:

MATH*2000	[0.50]	Set Theory
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0.50 electives

**Semester 6**

MATH*3260	[0.50]	Complex Analysis
PHYS*3220	[0.50]	Waves and Optics
PHYS*3400	[0.50]	Advanced Mechanics
PHYS*3510	[0.50]	Intermediate Laboratory
PHYS*4040	[0.50]	Quantum Mechanics II

**Semester 7**

PHYS*4120	[0.50]	Atomic and Molecular Physics
PHYS*4180	[0.50]	Advanced Electromagnetic Theory
PHYS*4240	[0.50]	Statistical Physics II

One 3000 or 4000 level mathematics course or 0.50 electives

One of:

PHYS*4500	[0.50]	Advanced Physics Laboratory
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0.50 electives

**Semester 8**

PHYS*4130	[0.50]	Subatomic Physics
PHYS*4150	[0.50]	Solid State Physics
PHYS*4510	[0.50]	Advanced Physics Project

One 3000 or 4000 level mathematics course

0.50 electives

\*those not taking MATH\*2210 in Semester 4 must consult the Department of Physics Departmental Advisor

**Wild Life Biology (WLB)****Department of Integrative Biology, College of Biological Science**

The Major in Wild Life Biology provides exposure to the ecological principles upon which the scientific management of wild life is based. This major prepares students for post-graduate work in ecology and management of wild life and provides a sound science background 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 must consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives \*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science electives \*

**Semester 3**

BIOC*2580	[0.50]	Introductory Biochemistry
ZOO*2070	[0.50]	Invertebrate Zoology I
ZOO*2090	[0.50]	Vertebrate Structure and Function
ZOO*2100	[0.50]	Developmental Biology

0.50 electives \*\*

**Semester 4**

BIOL*2210	[0.50]	Introductory Cell Biology
MBG*2000	[0.50]	Introductory Genetics
NUTR*3210	[0.50]	Fundamentals of Nutrition
ZOO*2080	[0.50]	Invertebrate Zoology II

0.50 electives \*\*

**Semester 5**

BIOL*3010	[0.50]	Laboratory and Field Work in Ecology
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BIOL*3110	[0.50]	Population Ecology
BOT*2050	[0.50]	Plant Ecology
ZOO*3200	[0.50]	Comparative Animal Physiology I
ZOO*3300	[0.50]	Evolution

**Semester 6**

ANSC*3180	[0.50]	Wildlife Nutrition
BIOL*3120	[0.50]	Community Ecology
ZOO*3210	[0.50]	Comparative Animal Physiology II

1.00 electives \*\*, \*\*\*

**Semester 7 \*\*\*\***

BIOL*4110	[0.75]	Ecological Methods
ZOO*4070	[0.50]	Animal Behaviour

1.25 electives \*\*

**Semester 8**

BIOL*4150	[0.50]	Wildlife Conservation and Management
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2.00 electives \*\*

\* CIS\*1200 is recommended for those needing to improve their computer skills

\*\* suggested electives list available from faculty advisors

\*\*\* BIOL\*2250 is strongly recommended if independent research project courses are anticipated in semester 7 and/or 8

\*\*\*\* a minimum of 0.75 credits from these courses may be taken as an alternative to BIOL\*4110 in semester 7:

IBIO*4500	[0.75]	Research in Integrative Biology I
IBIO*4510	[0.75]	Research in Integrative Biology II
ZOO*4300	[0.75]	Marine Biology and Oceanography
ZOO*4410	[0.75]	Field Ecology
ZOO*4600	[0.75]	Tropical Ecology
ZOO*4610	[0.75]	Arctic Ecology
ZOO*4700	[0.50]	Field Biology
ZOO*4710	[0.25]	Field Biology
ZOO*4800	[0.50]	Field Biology
ZOO*4810	[0.25]	Field Biology

Other field or research courses with approval of faculty advisor.

**Electives must include:**

1. A minimum of 1.00 credits from:

ZOO*4090	[0.50]	Ornithology
ZOO*4280	[0.50]	Mammalogy
ZOO*4430	[0.50]	Herpetology

2. At least 1.00 Arts and/or Social Science electives.

**Zoology (ZOO)****Department of Integrative Biology, College of Biological Science**

The Major in Zoology offers a broad education in the life sciences while providing a more specialized understanding of the structure, function and ecology of animals. This major qualifies students for post-graduate work in zoology and other life sciences and provides a sound science background 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 must consult the Faculty Advisor. A minimum total of 20.00 credits is required to complete the major.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1070	[0.50]	Introductory Physics for Life Sciences

0.50 Arts or Social Science electives \*

Students who are admitted deficient in one OAC/4U course in Biology, Chemistry or Physics must take the equivalent introductory course in first semester. The first-year science core in that subject should be completed by Semester 3.

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
PHYS*1080	[0.50]	Physics for Life Sciences
STAT*2040	[0.50]	Statistics I

0.50 Arts or Social Science electives \*

**Semester 3**

ZOO*2070	[0.50]	Invertebrate Zoology I
ZOO*2090	[0.50]	Vertebrate Structure and Function
ZOO*2100	[0.50]	Developmental Biology

1.00 electives \*\*

**Semester 4**

BIOL*2210	[0.50]	Introductory Cell Biology
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BIOL*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
ZOO*2080	[0.50]	Invertebrate Zoology II

0.50 electives \*\*

**Semester 5**

BIOL*3110	[0.50]	Population Ecology
ZOO*3200	[0.50]	Comparative Animal Physiology I
ZOO*3300	[0.50]	Evolution

1.00 electives \*\*

**Semester 6**

BIOL*3120	[0.50]	Community Ecology
ZOO*3210	[0.50]	Comparative Animal Physiology II

1.50 electives \*\*, \*\*\*

**Semester 7**

ZOO*3000	[0.50]	Comparative Histology
ZOO*4070	[0.50]	Animal Behaviour

1.50 electives \*\*

**Semester 8**

2.50 electives \*\*

\* CIS\*1200 is recommended for those needing to improve their computer skills

\*\* suggested electives list available from the faculty advisors

\*\*\* BIOL\*2250 is strongly recommended if independent research project courses are anticipated in semesters 7 and/or 8

**Electives must include:**

1. A minimum of 0.50 credits from:

IBIO*4500	[0.75]	Research in Integrative Biology I
IBIO*4510	[0.75]	Research in Integrative Biology II
ZOO*4170	[0.50]	Experimental Comparative Animal Physiology
ZOO*4300	[0.75]	Marine Biology and Oceanography
ZOO*4410	[0.75]	Field Ecology
ZOO*4600	[0.75]	Tropical Ecology
ZOO*4610	[0.75]	Arctic Ecology
ZOO*4700	[0.50]	Field Biology
ZOO*4710	[0.25]	Field Biology
ZOO*4800	[0.50]	Field Biology
ZOO*4810	[0.25]	Field Biology

Other field or research courses with approval of faculty advisor.

2. At least 1.00 Arts or Social Science electives.

3. This major must contain at least 6.00 science credits at the 3000 or 4000 level, which must include at least 2.00 at the 4000 level. The restricted elective in point number 1 above counts as part of this 3000 or 4000 level requirement.

**Note:** The Major in Zoology is a flexible program which allows students in consultation with faculty advisors, to design a program to meet their own needs and interests. For example, students may wish to concentrate in Evolutionary Physiology, Quantitative Zoology, or Systematic Zoology for which lists of electives are available from faculty advisors.

**Minor (Honours Program)**

Students in programs other than Zoology, Wildlife Biology, Marine and Freshwater Biology and Ecology 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 and will include:

BIOL*1030	[0.50]	Biology I
BIOL*1040	[0.50]	Biology II

4.00 additional credits in Zoology (ZOO\*) courses at the 2000 level or higher

## 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 on the agrifood systems. A series of 9 or 10 agricultural science (AGR\*XXXX) courses throughout the program enables students to further develop their abilities in communications, analysis and problem solving, computer applications and to increase their interpersonal skills. Students will be involved in cooperative 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 identifying another major in which they take a minimum of 6.00 credits.

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 communications 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. There is a strong commitment in the curriculum to the philosophy of "whole person development" and students are encouraged to identify personal goals that they wish to accomplish in each of these areas of their development.

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 1999.

Students may graduate with a degree in honours agricultural science. Students who wish to specialize in 1 of the major areas of study may do so by completing the courses identified for each major.

#### Additional Majors:

Agricultural Economics  
Agroecosystem Management  
Agronomy  
Animal Science  
Horticultural Science  
Organic Agriculture

### Declaration of a Major

All students are considered to be registered in honours agricultural science in the first 3 semesters of the program. Those who wish to select a different major may do so when they are selecting their courses for semester 4 or later. The course requirements are listed for each major in the following section.

Students may, with appropriate approvals, elect to complete Minors associated with other degree programs as listed in the undergraduate calendar.

### 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 program 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 normally apply for admission to the D.V.M. program after semester 4 or later. Applications must be submitted to the Admissions Services, Office of Registrar 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)

#### Semester 1

AGR*1100	[0.50]	Introduction to the Agrifood Systems
BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1080	[0.50]	Elements of Calculus I

#### Semester 2

AGR*1250	[0.50]	Agrifood System Trends & Issues
BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
ENGL*1200	[0.50]	Reading the Contemporary World

0.50 electives

#### Semester 3

AGR*2320	[0.50]	Soils in Agroecosystems
AGR*2350	[0.50]	Animal Production Systems and Industry
AGR*2400	[0.50]	Economics of the Canadian Food System
AGR*2470	[0.50]	Introduction to Plant Agriculture

0.50 restricted electives

#### Semester 4

SOIL*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management
STAT*2040	[0.50]	Statistics I

One of:

CROP*2110	[0.50]	Crop Ecology
HORT*3340	[0.50]	Culture of Plants

One of:

ANSC*2340	[0.50]	Structure of Farm Animals
ANSC*2360	[0.50]	Challenges and Opportunities in Animal Production
ANSC*3150	[0.50]	Principles of Farm Animal Care and Welfare

Note: ANSC\*2360 is a Fall offering and ANSC\*2340, ANSC\*3150 are Winter offerings.

0.50 restricted electives

#### Semester 5

AGEC*2700	[0.50]	Survey of Natural Resource Economics
FOOD*3070	[0.50]	Introduction to Food Processing

1.50 electives or restricted electives

#### Semester 6

EDRD*3400	[0.50]	Sustainable Rural Communities
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2.00 electives

### Semester 7 & 8

#### Students must choose either Option A or B in Semester 7 and 8

##### Option A:

AGR*4500	[0.50]	Agrifood Industry Problem-Solving
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4.50 electives

##### Option B

AGR*4450	[1.00]	Research Project in Agriculture I
AGR*4460	[1.00]	Research Project in Agriculture II

3.00 electives

### Restricted Electives

1. 2 of the following Restricted Electives are required:

BOT*2100	[0.50]	Life Strategies of Plants
BIOC*2580	[0.50]	Introductory Biochemistry
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2310	[0.50]	Intermediate Microeconomics
GEOL*3130	[0.50]	Agrogeology
MBG*2000	[0.50]	Introductory Genetics
SOIL*2120	[0.50]	Introduction to Environmental Stewardship

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 Program Counsellor for list of agricultural science courses.

3. A humanities or social science course (0.50 credits) at the 2000 level or above from the College of Arts or College of Social and Applied Human Sciences.

## Agricultural Economics (AGEC)

### Department of Agricultural Economics and Business

#### Semester 1

AGR*1100	[0.50]	Introduction to the Agrifood Systems
BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1080	[0.50]	Elements of Calculus I

#### Semester 2

AGR*1250	[0.50]	Agrifood System Trends & Issues
BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
ECON*1100	[0.50]	Introductory Macroeconomics
ENGL*1200	[0.50]	Reading the Contemporary World

#### Semester 3

AGR*2400	[0.50]	Economics of the Canadian Food System
ECON*2310	[0.50]	Intermediate Microeconomics

Two of:

AGR*2320	[0.50]	Soils in Agroecosystems
AGR*2350	[0.50]	Animal Production Systems and Industry
AGR*2470	[0.50]	Introduction to Plant Agriculture

0.50 electives or restricted electives

#### Semester 4

AGEC*2410	[0.50]	Agrifood Markets and Policy
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2740	[0.50]	Economic Statistics
ECON*2770	[0.50]	Introductory Mathematical Economics

0.50 electives or restricted electives

#### Semester 5

ECON*3740	[0.50]	Introduction to Econometrics
FOOD*3070	[0.50]	Introduction to Food Processing

One of:

AGR*2320	[0.50]	Soils in Agroecosystems
AGR*2350	[0.50]	Animal Production Systems and Industry
AGR*2470	[0.50]	Introduction to Plant Agriculture

1.00 electives or restricted electives

#### Semester 6

EDRD*3400	[0.50]	Sustainable Rural Communities
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2.00 electives or restricted electives

#### Semester 7 & 8

Students must choose either Option A or B in Semester 7 and 8

##### Option A:

##### Semester 7

AGEC*3030	[0.50]	The Firm and Markets
AGEC*4500	[0.50]	Decision Science

1.50 electives or restricted electives

##### Semester 8

AGEC*4000	[0.50]	Agricultural and Food Policy
AGR*4500	[0.50]	Agrifood Industry Problem-Solving

1.50 electives or restricted electives

##### Option B

##### Semester 7

AGEC*3030	[0.50]	The Firm and Markets
AGEC*4500	[0.50]	Decision Science
AGR*4450	[1.00]	Research Project in Agriculture I

0.50 electives or restricted electives

##### Semester 8

AGEC*4000	[0.50]	Agricultural and Food Policy
AGR*4460	[1.00]	Research Project in Agriculture II

1.00 electives or restricted electives

#### Restricted Electives

- Students are required to take at least 1.50 additional credits at the 3000 or 4000 level in the following subject areas: AGECE, MCS, ECON, or in an area otherwise approved by the faculty advisor. At least 1.00 of these additional credits must be at the 4000 level.
- 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.

## Agroecosystem Management (AGMN)

### Department of Land Resource Science

#### Semester 1

AGR*1100	[0.50]	Introduction to the Agrifood Systems
BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1080	[0.50]	Elements of Calculus I

#### Semester 2

AGR*1250	[0.50]	Agrifood System Trends & Issues
BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
ENGL*1200	[0.50]	Reading the Contemporary World

0.50 electives

#### Semester 3

AGR*2320	[0.50]	Soils in Agroecosystems
AGR*2350	[0.50]	Animal Production Systems and Industry
AGR*2400	[0.50]	Economics of the Canadian Food System
AGR*2470	[0.50]	Introduction to Plant Agriculture
SOIL*2120	[0.50]	Introduction to Environmental Stewardship

#### Semester 4

MET*2020	[0.50]	Agrometeorology
SOIL*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management
STAT*2040	[0.50]	Statistics I

1.00 electives or restricted electives

#### Semester 5

FOOD*3070	[0.50]	Introduction to Food Processing
SOIL*3080	[0.50]	Soil and Water Conservation
SOIL*3170	[0.50]	Soil Processes in Landscape

1.00 electives or restricted electives

#### Semester 6

EDRD*3400	[0.50]	Sustainable Rural Communities
GEOL*3130	[0.50]	Agrogeology
GEOL*3060	[0.50]	Groundwater

One of:

GEOG*2480	[0.50]	Mapping and GIS
SOIL*3600	[0.50]	Remote Sensing

0.50 electives or restricted electives

#### Semester 7 & 8

Students must choose either Option A or B in Semester 7 and 8

##### Option A:

##### Semester 7

One of:

SOIL*4110	[0.50]	Natural Resources Management Field Camp
SOIL*4210	[0.50]	Earth and Atmospheric Science Field Camp

2.00 electives or restricted electives

##### Semester 8

AGR*4500	[0.50]	Agrifood Industry Problem-Solving
PBIO*4100	[0.50]	Soil Plant Relationships

1.50 electives or restricted electives

##### Option B

##### Semester 7

AGR*4450	[1.00]	Research Project in Agriculture I
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One of:

SOIL*4110	[0.50]	Natural Resources Management Field Camp
SOIL*4210	[0.50]	Earth and Atmospheric Science Field Camp

1.00 electives or restricted electives

##### Semester 8

AGR*4460	[1.00]	Research Project in Agriculture II
PBIO*4100	[0.50]	Soil Plant Relationships

1.00 electives or restricted electives

#### Restricted Electives

- A minimum of 2.00 credits from one or more groupings in Land Resource Science from the list below:

Climate & Agroecosystems Management:

GEOG*3020	[0.50]	Global Environmental Change
GEOL*2200	[0.50]	Glacial Geology
MET*2030	[0.50]	Meteorology and Climatology
MET*3050	[0.50]	Microclimatology
MET*4210	[0.50]	Atmospheric Experimentation and Instrumentation
SOIL*4090	[0.50]	Soil Management

Nutrient Management:

GEOL*2200	[0.50]	Glacial Geology
SOIL*3060	[0.50]	Environmental Soil Chemistry

SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management
Organic Agriculture		
CROP*2050	[0.50]	Gateway to Organic Agriculture
CROP*2110	[0.50]	Crop Ecology
GEOL*2200	[0.50]	Glacial Geology
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management
Tropical Agroecosystem Management:		
AGEC*4210	[0.50]	World Agriculture and Economic Development
AGR*2500	[0.50]	Field Trip in International Agriculture
AGR*4000	[0.50]	Seminar in International Agriculture
GEOL*2110	[0.50]	Earth Material Science
HORT*4380	[0.50]	Tropical and Sub-Tropical Horticultural Crops
SOIL*4090	[0.50]	Soil Management
Natural Resource Management:		
ENVB*2030	[0.50]	Current Issues in Forest Science
GEOG*3610	[0.50]	Environmental Hydrology
GEOL*2200	[0.50]	Glacial Geology
SOIL*3050	[0.50]	Land Utilization
SOIL*3100	[0.50]	Resource Planning Techniques
ENVB*4780	[0.50]	Forest Ecology
Source Water Protection:		
BIOL*3450	[0.50]	Introduction to Aquatic Environments
ENVB*4020	[0.50]	Water Quality and Environmental Management
GEOG*3610	[0.50]	Environmental Hydrology
GEOL*2200	[0.50]	Glacial Geology
GEOL*3190	[0.50]	Environmental Water Chemistry
UNIV*3400	[0.50]	Watershed Planning Practice
ZOO*4350	[0.50]	Biology of Polluted Waters

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 Program Counsellor for list of agricultural science courses.

3. A humanities or social science course (0.50 credits) at the 2000 level or above from the College of Arts or College of Social and Applied Human Sciences.

Note: In this major there are fees charged to cover partial costs of some field trips. Students in need of financial assistance should approach the Chair of the department offering the course.

## Agronomy (AGRO)

### Departments of Plant Agriculture, and Land Resource Science

#### Semester 1

AGR*1100	[0.50]	Introduction to the Agrifood Systems
BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1080	[0.50]	Elements of Calculus I

#### Semester 2

AGR*1250	[0.50]	Agrifood System Trends & Issues
BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
ENGL*1200	[0.50]	Reading the Contemporary World

0.50 electives

#### Semester 3

AGR*2320	[0.50]	Soils in Agroecosystems
AGR*2350	[0.50]	Animal Production Systems and Industry
AGR*2400	[0.50]	Economics of the Canadian Food System
AGR*2470	[0.50]	Introduction to Plant Agriculture
BOT*2100	[0.50]	Life Strategies of Plants

#### Semester 4

BIOC*2580	[0.50]	Introductory Biochemistry
MBG*2000	[0.50]	Introductory Genetics
STAT*2040	[0.50]	Statistics I

1.00 electives or restricted electives

#### Semester 5

FOOD*3070	[0.50]	Introduction to Food Processing
MBG*3100	[0.50]	Plant Genetics
PBIO*3110	[0.50]	Crop Physiology
SOIL*3080	[0.50]	Soil and Water Conservation

0.50 electives or restricted electives

#### Semester 6

EDRD*3400	[0.50]	Sustainable Rural Communities
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2.00 electives or restricted electives

## Semester 7 & 8

Students must choose either Option A or B in Semester 7 and 8

### Option A:

#### Semester 7

CROP*4240	[0.50]	Weed Science
SOIL*4090	[0.50]	Soil Management

1.50 electives or restricted electives

#### Semester 8

AGR*4500	[0.50]	Agrifood Industry Problem-Solving
CROP*4220	[0.50]	Cropping Systems

1.50 electives or restricted electives

### Option B

#### Semester 7

AGR*4450	[1.00]	Research Project in Agriculture I
CROP*4240	[0.50]	Weed Science
SOIL*4090	[0.50]	Soil Management

0.50 electives or restricted electives

#### Semester 8

AGR*4460	[1.00]	Research Project in Agriculture II
CROP*4220	[0.50]	Cropping Systems

1.00 electives or restricted electives

## Restricted Electives

1. Select two of the following Agronomy major electives:

CROP*3300	[0.50]	Grain Crops
CROP*3310	[0.50]	Protein and Oilseed Crops
CROP*3340	[0.50]	Managed Grasslands

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 Program Counsellor for list of agricultural science courses.

3. A humanities or social science course (0.50 credits) at the 2000 level or above from the College of Arts or College of Social and Applied Human Sciences.

Highly Recommended courses:

CROP*2110	[0.50]	Crop Ecology
ENVB*3210	[0.50]	Plant Pathology
ENVB*4100	[0.50]	Applied Entomology
MBG*4160	[0.50]	Plant Breeding
PBIO*3750	[0.50]	Plant Tissue Culture
PBIO*4750	[0.50]	Genetic Engineering of Plants

## Animal Science (ANSC)

### Department of Animal and Poultry Science

#### Semester 1

AGR*1100	[0.50]	Introduction to the Agrifood Systems
BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
ECON*1050	[0.50]	Introductory Microeconomics
MATH*1080	[0.50]	Elements of Calculus I

#### Semester 2

AGR*1250	[0.50]	Agrifood System Trends & Issues
BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
ENGL*1200	[0.50]	Reading the Contemporary World

0.50 electives

#### Semester 3

AGR*2320	[0.50]	Soils in Agroecosystems
AGR*2350	[0.50]	Animal Production Systems and Industry
AGR*2400	[0.50]	Economics of the Canadian Food System
AGR*2470	[0.50]	Introduction to Plant Agriculture
MBG*2000	[0.50]	Introductory Genetics

#### Semester 4

ANSC*2340	[0.50]	Structure of Farm Animals
BIOC*2580	[0.50]	Introductory Biochemistry
MICR*2020	[0.50]	Microbial Interactions and Associations
STAT*2040	[0.50]	Statistics I

0.50 electives

#### Semester 5

ANSC*2360	[0.50]	Challenges and Opportunities in Animal Production
ANSC*3080	[0.50]	Agricultural Animal Physiology
NUTR*3210	[0.50]	Fundamentals of Nutrition
MBG*3090	[0.50]	Applied Animal Breeding

0.50 electives

#### Semester 6

2.50 electives or restricted electives

**Semester 7 & 8****Students must choose either Option A or B in Semester 7 and 8****Option A:****Semester 7**

POPM\*4230 [0.50] Animal Health

2.00 electives or restricted electives

**Semester 8**

AGR\*4500 [0.50] Agrifood Industry Problem-Solving

2.00 electives or restricted electives

**Option B****Semester 7**

AGR\*4450 [1.00] Research Project in Agriculture I

POPM\*4230 [0.50] Animal Health

1.00 electives or restricted electives

**Semester 8**

AGR\*4460 [1.00] Research Project in Agriculture II

1.50 electives or restricted electives

**Restricted Electives**

1. A minimum of 3.00 credits. 1.00 credits required from each of Animal Breeding, Animal Nutrition and Animal Physiology and Behaviour:

Animal Breeding:

ANSC\*4050 [0.50] Biotechnology in Animal Science

MBG\*3060 [0.50] Quantitative Genetics

MBG\*4030 [0.50] Animal Breeding Methods

Animal Nutrition:

ANSC\*3120 [0.50] Introduction to Animal Nutrition

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\*4470 [0.50] Animal Metabolism

ANSC\*4550 [0.50] Horse Nutrition

ANSC\*4560 [0.50] Pet Nutrition

Animal Physiology and Behaviour:

ANSC\*3150 [0.50] Principles of Farm Animal Care and Welfare

ANSC\*3300 [0.50] Animal Reproduction

ANSC\*4090 [0.50] Applied Animal Behaviour

ANSC\*4100 [0.50] Environmental Management and Animal Productivity

ANSC\*4130 [0.50] Reproductive Management and Technology

ANSC\*4490 [0.50] Applied Endocrinology

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 Program Counsellor for list of agricultural science courses.
3. A humanities or social science course (0.50 credits) at the 2000 level or above from the College of Arts or College of Social and Applied Human Sciences.

**Horticultural Science (HORT)****Department of Plant Agriculture****Semester 1**

AGR\*1100 [0.50] Introduction to the Agrifood Systems

BIOL\*1030 [0.50] Biology I

CHEM\*1040 [0.50] General Chemistry I

ECON\*1050 [0.50] Introductory Microeconomics

MATH\*1080 [0.50] Elements of Calculus I

**Semester 2**

AGR\*1250 [0.50] Agrifood System Trends &amp; Issues

BIOL\*1040 [0.50] Biology II

CHEM\*1050 [0.50] General Chemistry II

ENGL\*1200 [0.50] Reading the Contemporary World

0.50 electives

**Semester 3**

AGR\*2320 [0.50] Soils in Agroecosystems

AGR\*2400 [0.50] Economics of the Canadian Food System

AGR\*2470 [0.50] Introduction to Plant Agriculture

BOT\*2100 [0.50] Life Strategies of Plants

0.50 electives or restricted electives

**Semester 4**

BIOC\*2580 [0.50] Introductory Biochemistry

STAT\*2040 [0.50] Statistics I

1.50 electives or restricted electives

**Semester 5**

FOOD\*3070 [0.50] Introduction to Food Processing

HORT\*3230 [0.50] Plant Propagation

HORT\*3510 [0.50] Vegetable Production

P BIO\*3110 [0.50] Crop Physiology

0.50 electives or restricted electives

**Semester 6**

EDRD\*3400 [0.50] Sustainable Rural Communities

HORT\*3280 [0.50] Greenhouse Production

1.50 electives or restricted electives

**Semester 7 & 8****Students must choose either Option A or B in Semester 7 and 8****Option A:****Semester 7**

HORT\*4420 [0.50] Fruit Crops

SOIL\*4090 [0.50] Soil Management

1.50 electives or restricted electives

**Semester 8**

AGR\*4500 [0.50] Agrifood Industry Problem-Solving

HORT\*4300 [0.50] Postharvest Physiology

1.50 electives or restricted electives

**Option B****Semester 7**

AGR\*4450 [1.00] Research Project in Agriculture I

HORT\*4420 [0.50] Fruit Crops

SOIL\*4090 [0.50] Soil Management

0.50 electives or restricted electives

**Semester 8**

AGR\*4460 [1.00] Research Project in Agriculture II

HORT\*4300 [0.50] Postharvest Physiology

1.00 electives or restricted electives

**Restricted Electives**

1. Select two of the following Horticulture major electives:

CROP\*4240 [0.50] Weed Science

ENVB\*3210 [0.50] Plant Pathology

ENVB\*4100 [0.50] Applied Entomology

P BIO\*3750 [0.50] Plant Tissue Culture

P BIO\*4750 [0.50] Genetic Engineering of Plants

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 Program Counsellor for list of agricultural science courses.
3. A humanities or social science course (0.50 credits) at the 2000 level or above from the College of Arts or College of Social and Applied Human Sciences.

**Organic Agriculture(OAGR)****Department of Plant Agriculture and Department of Land Resource Science****Semester 1**

AGR\*1100 [0.50] Introduction to the Agrifood Systems

BIOL\*1030 [0.50] Biology I

CHEM\*1040 [0.50] General Chemistry I

ECON\*1050 [0.50] Introductory Microeconomics

MATH\*1080 [0.50] Elements of Calculus I

**Semester 2**

AGR\*1250 [0.50] Agrifood System Trends &amp; Issues

BIOL\*1040 [0.50] Biology II

CHEM\*1050 [0.50] General Chemistry II

ENGL\*1200 [0.50] Reading the Contemporary World

0.50 electives

**Semester 3**

AGR\*2320 [0.50] Soils in Agroecosystems

AGR\*2350 [0.50] Animal Production Systems and Industry

AGR\*2400 [0.50] Economics of the Canadian Food System

AGR\*2470 [0.50] Introduction to Plant Agriculture

CROP\*2050 [0.50] Gateway to Organic Agriculture

**Semester 4**

STAT\*2040 [0.50] Statistics I

GEOL\*3130 [0.50] Agrogeology

1.50 electives or restricted electives

**Semester 5**

AGR\*3500 [0.50] Experiential Education

BOT\*2100 [0.50] Life Strategies of Plants

FOOD\*3070 [0.50] Introduction to Food Processing

SOIL\*3030 [0.50] Tutorials in Organic Agriculture I

0.50 electives or restricted electives

### Semester 6

CROP*3130	[0.50]	Tutorials in Organic Agriculture II
EDRD*3400	[0.50]	Sustainable Rural Communities

1.50 electives or restricted electives

### Semester 7

AGEC*2300	[0.50]	Organic Marketing
SOIL*4160	[0.50]	Design of Organic Production Systems

1.50 electives or restricted electives

### Semester 8

AGR*4500	[0.50]	Agrifood Industry Problem-Solving
REXT*4180	[0.50]	Social Issues in Organic Agriculture

1.50 electives or restricted electives

### Restricted Electives

1. A minimum of 2.00 credits from the list of restricted electives below:

ANSC*2360	[0.50]	Challenges and Opportunities in Animal Production
ANSC*3150	[0.50]	Principles of Farm Animal Care and Welfare
CROP*2110	[0.50]	Crop Ecology
CROP*4240	[0.50]	Weed Science
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3210	[0.50]	Plant Pathology
ENVB*3300	[0.50]	Applied Ecology and Environment
ENVB*4100	[0.50]	Applied Entomology
GEOG*3320	[0.50]	Agriculture and Society
HORT*3260	[0.50]	Woody Plants
PBIO*4100	[0.50]	Soil Plant Relationships
PHIL*2070	[0.50]	Philosophy of the Environment
REXT*2000	[0.50]	Introduction to Rural Extension
SOAN*4220	[0.50]	Canadian Rural Women
SOC*3380	[0.50]	Society and Nature
SOC*4210	[0.50]	Advanced Topics in Rural Sociology
SOIL*3170	[0.50]	Soil Processes in Landscape
SOIL*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management

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 Program Counsellor for list of agricultural science courses.
3. A humanities or social science course (0.50 credits) at the 2000 level or above from the College of Arts or College of Social and Applied Human Sciences.

**Note:** In this major there are fees charged to cover partial costs of some field trips. Students in need of financial assistance should approach the Chair of the department.

### Electives

#### List A - Preferred Electives in Humanities and Social Science

0.50 credits at the 2000 level or above from the College of Arts or the College of Social and Applied Human Sciences.

#### List B - Electives in Agricultural Science and Related Disciplines

A list of faculty advisors for the following elective course groups is available from the Dean's Office, O.A.C.

#### Agricultural Economics and Business

*Department of Agricultural Economics and Business*

Business Management:

AGEC*2220	[0.50]	Financial Accounting
AGEC*2230	[0.50]	Management Accounting
AGEC*3310	[0.50]	Operations Management
AGEC*3320	[0.50]	Financial Management
AGEC*4370	[0.50]	Marketing Management

Farm Management:

AGEC*2220	[0.50]	Financial Accounting
AGEC*2230	[0.50]	Management Accounting
AGEC*4220	[0.50]	Advanced Farm Management
AGEC*4500	[0.50]	Decision Science

Finance:

AGEC*2220	[0.50]	Financial Accounting
AGEC*2230	[0.50]	Management Accounting
AGEC*3320	[0.50]	Financial Management
ECON*3560	[0.50]	Theory of Finance

Operations:

AGEC*2220	[0.50]	Financial Accounting
AGEC*2230	[0.50]	Management Accounting
AGEC*3310	[0.50]	Operations Management
AGEC*4500	[0.50]	Decision Science

Prices and Policy:

AGEC*3030	[0.50]	The Firm and Markets
AGEC*4000	[0.50]	Agricultural and Food Policy
ECON*2770	[0.50]	Introductory Mathematical Economics
ECON*3740	[0.50]	Introduction to Econometrics
Resource and Environmental Economics:		
AGEC*2700	[0.50]	Survey of Natural Resource Economics
AGEC*4290	[0.50]	Land Economics
AGEC*4310	[0.50]	Resource Economics
ECON*2410	[0.50]	Intermediate Macroeconomics
Sales and Marketing:		
AGEC*4240	[0.50]	Futures and Options Markets
AGEC*4360	[0.50]	Marketing Research
AGEC*4370	[0.50]	Marketing Management
AGEC*4410	[0.50]	Sales and Sales Management

#### Agronomy

*Department of Plant Agriculture, and Department of Land Resource Science*

Crop Management Systems:

CROP*4220	[0.50]	Cropping Systems
CROP*4240	[0.50]	Weed Science

One of:

CROP*3300	[0.50]	Grain Crops
CROP*3310	[0.50]	Protein and Oilseed Crops
CROP*3340	[0.50]	Managed Grasslands

Crop Physiology:

BOT*4380	[0.50]	Metabolism in the Whole Life of Plants
PBIO*3110	[0.50]	Crop Physiology
PBIO*4100	[0.50]	Soil Plant Relationships
PBIO*4600	[0.75]	Plant Environment Interaction and Stress Physiology

Plant Biotechnology:

MBG*4160	[0.50]	Plant Breeding
PBIO*3750	[0.50]	Plant Tissue Culture

One of:

MBG*3100	[0.50]	Plant Genetics
PBIO*4030	[0.50]	Plant Cell Biology

Plant Genetic Resources:

MBG*3100	[0.50]	Plant Genetics
MBG*4160	[0.50]	Plant Breeding

One of:

MBG*4200	[0.50]	Transmission Genetics
MBG*4240	[0.50]	Applied Molecular Genetics

Soil Management and Fertility:

GEOL*4130	[0.50]	Clay and Humic Chemistry
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3200	[0.50]	Environmental Soil Biology

One of:

CROP*4260	[0.50]	Crop Science Field Trip
SOIL*3600	[0.50]	Remote Sensing
SOIL*4090	[0.50]	Soil Management
SOIL*4110	[0.50]	Natural Resources Management Field Camp

Waste Management/Agriculture:

CHEM*3360	[0.50]	Environmental Chemistry and Toxicology
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management

Water Management/Agriculture:

ENGG*2550	[0.50]	Water Management
GEOL*3060	[0.50]	Groundwater
SOIL*3070	[0.50]	Environmental Soil Physics

#### Animal and Poultry Science

*Department of Animal and Poultry Science*

Animal Breeding:

ANSC*4050	[0.50]	Biotechnology in Animal Science
MBG*3060	[0.50]	Quantitative Genetics
MBG*4030	[0.50]	Animal Breeding Methods

Animal Nutrition:

ANSC*3120	[0.50]	Introduction to Animal Nutrition
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*4550	[0.50]	Horse Nutrition
ANSC*4560	[0.50]	Pet Nutrition

Animal Physiology and Behaviour:

ANSC*3300	[0.50]	Animal Reproduction
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ANSC*4130	[0.50]	Reproductive Management and Technology
ANSC*4490	[0.50]	Applied Endocrinology
ANSC*4090	[0.50]	Applied Animal Behaviour
ANSC*4100	[0.50]	Environmental Management and Animal Productivity

### Environmental Biology

#### Department of Environmental Biology

##### Environmental Stress Physiology:

BOT*4380	[0.50]	Metabolism in the Whole Life of Plants
PBIO*4100	[0.50]	Soil Plant Relationships
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants
PBIO*4600	[0.50]	Plant Environment Interaction and Stress

##### Pest Management:

CROP*4240	[0.50]	Weed Science
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3210	[0.50]	Plant Pathology
ENVB*4100	[0.50]	Applied Entomology

### Food Science

#### Department of Food Science

##### Food Business:

AGEC*4410	[0.50]	Sales and Sales Management
FOOD*4700	[0.50]	Food Product Development
MCS*2600	[0.50]	Fundamentals of Consumer Behaviour
MCS*3010	[0.50]	Quality Management

##### Food Science:

FOOD*4070	[0.50]	Food Packaging
FOOD*4120	[0.75]	Food Analysis
FOOD*4350	[0.50]	Processing Plant Technology

##### Food Technology:

FOOD*4110	[0.50]	Meat and Poultry Processing
FOOD*4400	[0.50]	Dairy Processing
FOOD*4520	[0.50]	Cereal Technology

### Horticultural Science

#### Department of Plant Agriculture

##### Fruit/Vegetable Horticulture:

HORT*3280	[0.50]	Greenhouse Production
HORT*3510	[0.50]	Vegetable Production
HORT*4300	[0.50]	Postharvest Physiology
HORT*4380	[0.50]	Tropical and Sub-Tropical Horticultural Crops
HORT*4420	[0.50]	Fruit Crops

##### Ornamental Horticulture:

HORT*3010	[0.50]	Annual, Perennial and Indoor Plants - Identification and Use
HORT*3220	[0.50]	Turf Management
HORT*3260	[0.50]	Woody Plants
HORT*3340	[0.50]	Culture of Plants
HORT*4250	[0.50]	Nursery Production

##### Urban Horticulture & Environmental Management:

ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3030	[0.50]	Pesticides and the Environment
HORT*3010	[0.50]	Annual, Perennial and Indoor Plants - Identification and Use
HORT*3340	[0.50]	Culture of Plants
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants

### Interdepartmental/Interdisciplinary

##### Animal Health:

ANSC*3080	[0.50]	Agricultural Animal Physiology
POPM*3240	[0.50]	Epidemiology
POPM*4230	[0.50]	Animal Health

##### Aquatic Health:

PATH*4100	[0.50]	Diseases of Aquatic Animals
ZOO*4110	[0.50]	Principles of Fish and Wild Life Management

##### Biotechnology:

MICR*4260	[0.50]	Microbial Technology
PBIO*3750	[0.50]	Plant Tissue Culture

##### International Development:

AGEC*4210	[0.50]	World Agriculture and Economic Development
AGR*2500	[0.50]	Field Trip in International Agriculture
AGR*4000	[0.50]	Seminar in International Agriculture
GEOL*3130	[0.50]	Agrogeology
REXT*3060	[0.50]	International Communication
REXT*4020	[0.50]	Rural Extension in Change and Development

##### Toxicology:

BIOM*3090	[0.50]	Principles of Pharmacology and Toxicology
TOX*2000	[0.50]	Principles of Toxicology
TOX*3300	[0.50]	Analytical Toxicology

### Land Resource Science

##### Agroforestry:

BOT*2050	[0.50]	Plant Ecology
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*4780	[0.50]	Forest Ecology
HORT*3260	[0.50]	Woody Plants
SOIL*4090	[0.50]	Soil Management

##### Atmospheric Science:

GEOG*2110	[0.50]	Climate and the Biophysical Environment
MET*2020	[0.50]	Agrometeorology
MET*2030	[0.50]	Meteorology and Climatology
MET*3050	[0.50]	Microclimatology
MET*4210	[0.50]	Atmospheric Experimentation and Instrumentation
MET*4300	[0.50]	Atmospheric Transport and Chemistry

##### Computer-Assisted Resource Analysis:

CIS*1500	[0.50]	Introduction to Programming
GEOG*2480	[0.50]	Mapping and GIS
GEOG*4480	[0.50]	Applied Geographic Information Systems
SOIL*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management
SOIL*3600	[0.50]	Remote Sensing

##### One of:

ENGG*3340	[0.50]	Geographic Information Systems in Environmental Engineering
GEOG*3480	[0.50]	GIS and Spatial Analysis

##### Natural Resource Management:

GEOG*3320	[0.50]	Agriculture and Society
SOIL*2120	[0.50]	Introduction to Environmental Stewardship
SOIL*3050	[0.50]	Land Utilization
SOIL*3100	[0.50]	Resource Planning Techniques
SOIL*4110	[0.50]	Natural Resources Management Field Camp

##### Soil Science:

GEOL*4130	[0.50]	Clay and Humic Chemistry
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4070	[0.50]	Problems in Land Resource Science
SOIL*4090	[0.50]	Soil Management
SOIL*4170	[0.50]	Soil Processes in the Landscape

##### Terrestrial Ecology:

BOT*2050	[0.50]	Plant Ecology
CROP*2110	[0.50]	Crop Ecology
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4290	[0.50]	Microbial Ecology
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management

### Rural Extension Studies

##### Communications:

GEOG*3320	[0.50]	Agriculture and Society
REXT*3040	[0.50]	Communication Process
REXT*3080	[0.50]	Technology in Extension
Human Resource and Community Development:		
REXT*2000	[0.50]	Introduction to Rural Extension
REXT*3000	[0.50]	Program Development and Evaluation
REXT*3100	[0.50]	Teaching and Learning in Non-Formal Education
REXT*4100	[0.50]	Leadership Development in Rural Organization

## Bachelor of Science in Engineering [B.Sc.(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 systems and computing, biological, environmental 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; 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 the Canadian Council of Professional Engineers. 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. A minimum of 23.50 credits must be obtained. At least 3.00 credits must be complementary studies, which 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 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.Sc.(Eng.) Program Guide available from the director or program counsellor of the School of Engineering.

#### Programs

The choice of program is made at the time of application. Change of program requires the approval of the director.

The available programs are:

Biological Engineering - the application of engineering to the control and management of biological processes, environments, and human factors in engineering design.

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.

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 OAC courses are advised to consult the Recommendations and Notes in Section IV--Admission Information-B.Sc.(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.Sc. (Eng.) program and will not be readmitted to the degree program if the same course is failed three times.

Normally, students in the B.Sc. (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.Sc. (Eng.) program, obtaining a minimum of 23.50 credits 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.SC. (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.

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 (i.e. be a Canadian citizen or a permanent resident in Canada)
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.

Co-op Work Schedule					
	Yr. 1	Yr. 2	Yr. 3	Yr. 4	Yr. 5
Fall	1	3	5	6	work
Winter	2	4	work	7	8
Spring		work	work	work	

All candidates must complete a minimum of 4 of the preceding 5 work terms.

#### Biological Engineering Program Regular and Co-op (BIOE/BIOE:C)

##### School of Engineering, College of Physical and Engineering Science

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 relates to the control of technological processes with the aim of enhancing human, animal and plant life. The program encompasses the technologies of biotechnology, waste management, food engineering, and ergonomics. For example, a Biological Engineer concentrating on biotechnology might design and manage bioreactors to improve their productivity. A career in Biomedical Engineering, which requires graduate work beyond the Bachelor's degree, involves designing instruments and diagnostic techniques to be used in the practice of medicine, developing prosthetic devices, and applying engineering techniques to the study of physiological systems.

#### Major (Honours Program)

##### Semester 1 - Regular or Co-op

CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
ENGG*1100	[0.75]	Engineering and Design I
HIST*1250	[0.50]	Science and Society Since 1500
MATH*1200	[0.50]	Calculus I

##### Semester 2 - Regular or Co-op

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*1130	[0.50]	Physics with Applications

##### Semester 3 - Regular or Co-op

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
MATH*2270	[0.50]	Applied Differential Equations
MICR*1020	[0.50]	Fundamentals of Applied Microbiology

**Semester 4 - Regular or Co-op**

BIOC*2580	[0.50]	Introductory Biochemistry
ENGG*2230	[0.50]	Fluid Mechanics
ENGG*2450	[0.50]	Network Theory
ENGG*2660	[0.50]	Biological Engineering Systems I
MATH*2130	[0.50]	Numerical Methods
STAT*2120	[0.50]	Probability and Statistics for Engineers

**Semester 5 - Regular or Co-op**

ENGG*3160	[0.50]	Biological Engineering Systems II
ENGG*3170	[0.50]	Biomaterials
ENGG*3240	[0.50]	Engineering Economics
ENGG*3260	[0.50]	Thermodynamics
ENGG*3450	[0.50]	Electrical Devices

0.50 restricted electives

**Semester 6 Regular / Semester 7 Co-op**

ENGG*3100	[0.75]	Engineering and Design III
ENGG*3410	[0.50]	Systems and Control Theory
ENGG*3430	[0.50]	Heat and Mass Transfer

1.00 restricted electives

**Semester 7 Regular / Semester 6 Co-op**

ENGG*4390	[0.75]	Bio-instrumentation Design
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2.75 restricted electives

**Semester 8 (Winter) - Regular or Co-op**

ENGG*4110	[1.00]	Biological Engineering Design IV
ENGG*4280	[0.75]	Digital Process Control Design

1.00 restricted electives

**Restricted Electives (see Program Guide for more information)**

- 2.00 credits in Complementary Studies Electives
- 0.75 credits in required Design electives
- 1.00 credits in Biological Engineering Electives
- 1.00 credits in Life Science Electives
- 0.50 credits in Free electives

**Engineering Systems and Computing Program Regular and Co-op (ESC/ESC:C)****School of Engineering, College of Physical and Engineering Science**

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 - Regular or Co-op**

CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
ENGG*1100	[0.75]	Engineering and Design I
HIST*1250	[0.50]	Science and Society Since 1500
MATH*1200	[0.50]	Calculus I

**Semester 2 - Regular or Co-op**

CIS*1900	[0.50]	Discrete Structures in Computer Science
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*1130	[0.50]	Physics with Applications

**Semester 3 - Regular or Co-op**

CIS*2430	[0.50]	Object Oriented Programming
COOP*1100	[0.00]	Introduction to Co-operative Education
ENGG*2100	[0.75]	Engineering and Design II
ENGG*2120	[0.50]	Material Science
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 - Regular or Co-op**

CIS*3110	[0.50]	Operating Systems
ENGG*2230	[0.50]	Fluid Mechanics

ENGG*2450	[0.50]	Network Theory
MATH*2130	[0.50]	Numerical Methods
STAT*2120	[0.50]	Probability and Statistics for Engineers

0.50 restricted electives

**Semester 5 - Regular or Co-op**

CIS*2520	[0.50]	Data Structures
ENGG*3260	[0.50]	Thermodynamics
ENGG*3390	[0.50]	Signal Processing
ENGG*3450	[0.50]	Electrical Devices
ENGG*3640	[0.50]	Microcomputer Interfacing

0.50 restricted electives

**Semester 6 Regular / Semester 7 Co-op**

ENGG*3100	[0.75]	Engineering and Design III
ENGG*3410	[0.50]	Systems and Control Theory
ENGG*3430	[0.50]	Heat and Mass Transfer

1.00 or 1.25 restricted electives

**Semester 7 Regular / Semester 6 Co-op**

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 8 - Regular or Co-op**

ENGG*4120	[1.00]	Engineering Systems and Computing Design IV
ENGG*4280	[0.75]	Digital Process Control Design

1.00 electives

**Restricted Electives (see Program Guide for more information)**

2.00 credits in Complementary Studies

1.50 credits in ES&amp;C Engineering Electives

0.75 credits in Engineering Design Electives

**Environmental Engineering Program Regular and Co-op (ENVE/ENVE:C)****School of Engineering, College of Physical and Engineering Science**

In recent years there has been concern about the degradation of the environment. The School of Engineering has responded to this concern by developing an Environmental Engineering program. Graduates will possess design and skills to minimize and prevent the impact of human activities on water, soil and air systems. Graduates will also creatively integrate humanistic and social perspectives in their solutions.

**Major (Honours Program)****Semester 1 - Regular or Co-op**

CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
ENGG*1100	[0.75]	Engineering and Design I
HIST*1250	[0.50]	Science and Society Since 1500
MATH*1200	[0.50]	Calculus I

**Semester 2 - Regular or Co-op**

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*1130	[0.50]	Physics with Applications

**Semester 3 - Regular or Co-op**

COOP*1100	[0.00]	Introduction to Co-operative Education
ENGG*2100	[0.75]	Engineering and Design II
ENGG*2120	[0.50]	Material Science
ENGG*2400	[0.50]	Engineering Systems Analysis
MATH*2270	[0.50]	Applied Differential Equations

0.50 restricted electives

One of:

BIOL*1030	[0.50]	Biology I
MICR*1020	[0.50]	Fundamentals of Applied Microbiology

**Semester 4 - Regular or Co-op**

ENGG*2230	[0.50]	Fluid Mechanics
ENGG*2450	[0.50]	Network Theory
ENGG*2560	[0.50]	Environmental Engineering Systems
MATH*2130	[0.50]	Numerical Methods
STAT*2120	[0.50]	Probability and Statistics for Engineers

One of:

BIOL*1040	[0.50]	Biology II
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0.50 restricted electives

Note: Students select 0.50 restricted electives in Semester 4 if MICR\*1020 was selected in Semester 3.

**Semester 5 - Regular or Co-op**

ENGG*3180	[0.50]	Air Quality
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ENGG*3240	[0.50]	Engineering Economics
ENGG*3260	[0.50]	Thermodynamics
ENGG*3590	[0.50]	Water Quality
ENGG*3650	[0.50]	Hydrology

0.50 restricted electives

**Semester 6 Regular / Semester 7 Co-op**

ENGG*3100	[0.75]	Engineering and Design III
ENGG*3410	[0.50]	Systems and Control Theory
ENGG*3430	[0.50]	Heat and Mass Transfer
ENGG*3470	[0.50]	Mass Transfer Operations

1.00 restricted electives

**Semester 7 Regular / Semester 6 Co-op**

ENGG*3670	[0.50]	Soil Mechanics
ENGG*4330	[0.75]	Air Pollution Control
ENGG*4340	[0.50]	Solid and Hazardous Waste Management
ENGG*4370	[0.75]	Urban Water Systems Design

0.50 restricted electives

**Semester 8 - Regular or Co-op**

ENGG*4130	[1.00]	Environmental Engineering Design IV
ENGG*4260	[0.75]	Water and Wastewater Treatment Design
GEOL*3060	[0.50]	Groundwater

0.50 restricted electives

**Restricted Electives**

Environmental engineering students must complete the following restricted electives (see Program Guide for more information). You can take these courses where Restricted Electives are indicated in the schedule of courses. A maximum of three 1000 level electives is allowed. Restricted electives must include:

2.00 credits in Complementary Studies electives

0.50 credits in Free electives

0.50 credits in Science/Engineering electives

One of:

0.50 credits in Science electives (if MICR\*1020 is selected in Semester 3)

BIOL\*1040 (if BIOL\*1030 is selected in Semester 3)

Note: The following courses should not be used as Free Electives:

CHEM*2820	[0.50]	Thermodynamics and Kinetics
CHEM*2880	[0.50]	Physical Chemistry
GEOG*3620	[0.50]	Desert Environments
GEOL*3190	[0.50]	Environmental Water Chemistry
PHYS*1600	[0.50]	Contemporary Astronomy
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3080	[0.50]	Soil and Water Conservation
TOX*3360	[0.50]	Environmental Chemistry and Toxicology

**Minor (Honours Program)**

Students must be registered in the B.Sc.(Eng.) degree program to apply for a Minor in Environmental Engineering.

The minor can be satisfied by taking the following additional courses:

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*3360	[0.50]	Environmental Chemistry and Toxicology
ENGG*3180	[0.50]	Air Quality
ENGG*3590	[0.50]	Water Quality
ENGG*4260	[0.75]	Water and Wastewater Treatment Design
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
MICR*1020	[0.50]	Fundamentals of Applied Microbiology
MICR*4180	[0.50]	Microbial Processes in Environmental Management

One of:

ENGG*2560	[0.50]	Environmental Engineering Systems
ENGG*2660	[0.50]	Biological Engineering Systems I

One of:

ENGG*3470	[0.50]	Mass Transfer Operations
ENGG*4330	[0.75]	Air Pollution Control
ENGG*4340	[0.50]	Solid and Hazardous Waste Management

*Students must select an environmental application project for the design course in the student's major program.*

**Water Resources Engineering Program Regular and Co-op (WRE/WRE:C)****School of Engineering, College of Physical and Engineering Science**

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. 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 - Regular or Co-op**

CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
ENGG*1100	[0.75]	Engineering and Design I
HIST*1250	[0.50]	Science and Society Since 1500
MATH*1200	[0.50]	Calculus I

**Semester 2 - Regular or Co-op**

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*1130	[0.50]	Physics with Applications

**Semester 3 - Regular or Co-op**

COOP*1100	[0.00]	Introduction to Co-operative Education
ENGG*2100	[0.75]	Engineering and Design II
ENGG*2120	[0.50]	Material Science
ENGG*2400	[0.50]	Engineering Systems Analysis
GEOG*2000	[0.50]	Geomorphology
MATH*2270	[0.50]	Applied Differential Equations
MICR*1020	[0.50]	Fundamentals of Applied Microbiology

**Semester 4 - Regular or Co-op**

ENGG*2230	[0.50]	Fluid Mechanics
ENGG*2450	[0.50]	Network Theory
ENGG*2550	[0.50]	Water Management
ENGG*2560	[0.50]	Environmental Engineering Systems
MATH*2130	[0.50]	Numerical Methods
STAT*2120	[0.50]	Probability and Statistics for Engineers

**Semester 5 - Regular or Co-op**

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

**Semester 6 Regular / Semester 7 Co-op**

ENGG*3100	[0.75]	Engineering and Design III
ENGG*3430	[0.50]	Heat and Mass Transfer
GEOL*3060	[0.50]	Groundwater

1.50 restricted electives

**Semester 7 Regular / Semester 6 Co-op**

ENGG*3340	[0.50]	Geographic Information Systems in Environmental Engineering
ENGG*4250	[0.75]	Watershed Systems Design
ENGG*4360	[0.75]	Soil-Water Conservation Systems Design
ENGG*4370	[0.75]	Urban Water Systems Design

0.50 restricted electives

**Semester 8 (Winter) Regular or Co-op**

ENGG*4150	[1.00]	Water Resources Engineering Design IV
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1.50 restricted electives

**Restricted Electives (see Program Guide for more information)**

- 1.00 credits in Water Resources Engineering electives
- 0.50 credits in Environmental electives
- 2.00 credits in Complementary Studies
- 0.50 credits in Water Resources electives

**Food Engineering (FENG)****School of Engineering, College of Physical and Engineering Science****Minor (Honours Program)**

Students must be registered in the B.Sc.(Eng.) degree program to apply for a Minor in Food Engineering.

The minor can be satisfied by taking the following additional courses:

AGEC*2220	[0.50]	Financial Accounting
BIOC*2580	[0.50]	Introductory 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*1020	[0.50]	Fundamentals of Applied Microbiology

0.75 Biological Engineering Design Course\*

One of:

ENGG*4300	[0.75]	Food Processing Engineering Design
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ENGG*4380	[0.75]	Bioreactor Design
Two of:		
FOOD*4070	[0.50]	Food Packaging
FOOD*4110	[0.50]	Meat and Poultry Processing
MCS*3010	[0.50]	Quality Management
One of:		
FOOD*3160	[0.75]	Food Processing I
FOOD*4520	[0.50]	Cereal Technology
One of:		
FOOD*2400	[0.50]	Introduction to Food Chemistry
FOOD*3010	[0.50]	Food Chemistry
FOOD*3230	[0.75]	Food Microbiology
FOOD*3260	[0.50]	Industrial Microbiology

*\*students must select a food application project for the design course in the student's major program*

**NOTE:** Courses taken for the minors are credited to appropriate elective areas.

## 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 problem solving perspective 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 both good writing ability and oral communication ability. This is emphasized particularly in the Environmental Sciences core courses, starting in first year, and running through to fourth year. Students in the final years 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, Faculty of Environmental Sciences. 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 qualify for graduation from the B.Sc.(Env.) program, the student must have completed successfully the stated course requirements for the program.

#### Environmental Sciences (Co-op)

Office of the Associate Dean, Faculty of Environmental Sciences.

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 program 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 the semester preceding COOP\*1000 (ie. in semester 2 ).

Year	Fall	Winter	Spring
1	Academic Term 1	Academic Term 2	Off
2	Academic Term 3	COOP*1000	Academic Term 4
3	COOP*2000	Academic Term 5	COOP*3000
4	Academic Term 6	Academic Term 7	COOP*4000 (Optional)
5	Academic Term 8		

Since some of the program requirements in the degree program (core, major, area of emphasis) 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 20.00 credits, as follows:

1. 5.00 First Year Curriculum
2. 3.00 Environmental Sciences Core
3. 7.00-8.00 Environmental Sciences Major
4. 2.50 minimum Area of Emphasis
5. 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.

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

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

##### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

\*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 core Environmental Sciences courses in the semesters recommended below:

BIOL*2060	[0.50]	Ecology
ENVS*2010	[0.50]	Decision-making and Communication Skills
ENVS*4011/2	[0.50]	Colloquium/Project in Environmental Sciences
PHIL*2070	[0.50]	Philosophy of the Environment

Note: BIOL\*2060 is to be taken in Semester 3 or 4, ENVS\*2010 is to be taken in Semester 3, the series ENVS\*4011, ENVS\*4012 is to be taken consecutively during the last complete academic year (F-W) Semester 7/8 or Semester 6/7 (Co-op), and PHIL\*2070 is to be taken in Semester 4, 5 or 6 (preference is earlier in program).

One of:

AGEC*2700	[0.50]	Survey of Natural Resource Economics
ECON*2100	[0.50]	Economic Growth and Environmental Quality

Note: Either AGECE\*2700 or ECON\*2100 is to be taken in Semester 3.

One of:

GEOG*3210	[0.50]	Management of the Biophysical Environment
POLS*3370	[0.50]	Environmental Policy Formation and Administration
ZOO*4050	[0.50]	Natural Resources Policy

Note: One of GEOG\*3210 and POLS\*3370 are to be taken in Semester 4 or 6 or ZOO\*4050 is to be taken in Semester 7 or 8.

#### Environmental Sciences Majors

Earth and Atmospheric Science

Ecology

Environmental Economics and Policy

Environmental Geography

Environmental Monitoring and Analysis

Environmental Protection

Environmetrics

Natural Resources Management

Requirements for each of these majors are described in the detailed schedules of studies below.

#### Area of Emphasis Requirements

All students must choose an area of emphasis consisting of a minimum of 2.50 credits in a particular topic area. These are listed after "Schedules of Studies". The sequence of courses normally begins in third year. With the approval of the Program Counsellor, students may develop their own area of emphasis. All areas of emphasis must be approved by the Program Counsellor. Students should note that entry to certain areas of emphasis is restricted by the student's choice of major. Thus program approval should be gained before registering in courses to count towards their area of emphasis.

#### Earth and Atmospheric Science (EAAS)

Department of Land Resource Science, Ontario Agricultural College

##### Major

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.

In this major there are fees charged to cover partial costs of some field trips. Students in need of financial assistance should approach the Chair of the department offering the course.

##### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3**

GEOL*1050	[0.50]	Geology and the Environment
MET*2030	[0.50]	Meteorology and Climatology
STAT*2040	[0.50]	Statistics I

1.00 core requirements or electives

**Semester 4**

SOIL*2010	[0.50]	Soil Science
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2.00 core requirements or electives

**Semester 5**

GEOL*2110	[0.50]	Earth Material Science
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1.50 core requirements, restricted electives or electives

One of:

MATH*1210	[0.50]	Calculus II
MATH*2080	[0.50]	Elements of Calculus II
STAT*2050	[0.50]	Statistics II

**Semester 6**

SOIL*3600	[0.50]	Remote Sensing
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One of:

GEOL*3060	[0.50]	Groundwater
SOIL*3070	[0.50]	Environmental Soil Physics

1.50 core requirements, restricted electives or electives

**Semester 7**

SOIL*4210	[0.50]	Earth and Atmospheric Science Field Camp
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2.00 core requirements, restricted electives or electives

**Semester 8**

2.50 core requirements, restricted electives or electives

**Restricted Electives**

Students in the Earth and Atmospheric Science major are required to choose 2.50 credits from the following lists. Students are encouraged to consult with the faculty advisor for assistance.

**List A - Environmental Geology**

GEOL*2020	[0.50]	Stratigraphy
GEOL*2200	[0.50]	Glacial Geology
GEOL*3100	[0.50]	Non-Renewable Earth Resources
GEOL*3130	[0.50]	Agrogeology
GEOL*4090	[0.50]	Sedimentology
GEOL*4130	[0.50]	Clay and Humic Chemistry

**List B - Soil Science**

PBIO*4100	[0.50]	Soil Plant Relationships
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3080	[0.50]	Soil and Water Conservation
SOIL*3170	[0.50]	Soil Processes in Landscape
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management

**List C - Water**

ENGG*2550	[0.50]	Water Management
ENGG*3650	[0.50]	Hydrology
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*4150	[0.50]	Sedimentary Processes
GEOL*3190	[0.50]	Environmental Water Chemistry
SOIL*3080	[0.50]	Soil and Water Conservation

**List D - Atmosphere**

GEOG*2110	[0.50]	Climate and the Biophysical Environment
MET*3050	[0.50]	Microclimatology
MET*4210	[0.50]	Atmospheric Experimentation and Instrumentation
MET*4300	[0.50]	Atmospheric Transport and Chemistry

**Earth and Atmospheric Science (EAAS:C)****Department of Land Resource Science, Ontario Agricultural College****Major**

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.

In this major there are fees charged to cover partial costs of some field trips. Students in need of financial assistance should approach the Chair of the department offering the course.

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3 - Fall**

GEOL*1050	[0.50]	Geology and the Environment
MET*2030	[0.50]	Meteorology and Climatology
STAT*2040	[0.50]	Statistics I

1.00 core requirements or electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

SOIL*2010	[0.50]	Soil Science
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One of:

MATH*1210	[0.50]	Calculus II
MATH*2080	[0.50]	Elements of Calculus II
STAT*2050	[0.50]	Statistics II

1.50 core requirements, restricted electives or electives

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

SOIL*3600	[0.50]	Remote Sensing
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One of:

GEOL*3060	[0.50]	Groundwater
SOIL*3070	[0.50]	Environmental Soil Physics

1.50 core requirements, restricted electives or electives

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6- Fall**

GEOL*2110	[0.50]	Earth Material Science
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2.00 core requirements, restricted electives or electives

**Semester 7- Winter**

2.50 core requirements, restricted electives or electives

**Summer Semester (Optional)**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 8**

SOIL*4210	[0.50]	Earth and Atmospheric Science Field Camp
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2.00 core requirements, restricted electives or electives

**Restricted Electives**

Students in the Earth and Atmospheric Science major are required to choose 2.50 credits from the following lists. Students are encouraged to consult with the faculty advisor for assistance.

**List A - Environmental Geology**

GEOL*2020	[0.50]	Stratigraphy
GEOL*2200	[0.50]	Glacial Geology
GEOL*3100	[0.50]	Non-Renewable Earth Resources
GEOL*3130	[0.50]	Agrogeology
GEOL*4090	[0.50]	Sedimentology
GEOL*4130	[0.50]	Clay and Humic Chemistry

**List B - Soil Science**

PBIO*4100	[0.50]	Soil Plant Relationships
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3080	[0.50]	Soil and Water Conservation
SOIL*3170	[0.50]	Soil Processes in Landscape
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management

**List C - Water**

ENGG*2550	[0.50]	Water Management
ENGG*3650	[0.50]	Hydrology
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*4150	[0.50]	Sedimentary Processes
GEOL*3190	[0.50]	Environmental Water Chemistry

SOIL\*3080 [0.50] Soil and Water Conservation

### List D - Atmosphere

GEOG\*2110 [0.50] Climate and the Biophysical Environment

MET\*3050 [0.50] Microclimatology

MET\*4210 [0.50] Atmospheric Experimentation and Instrumentation

MET\*4300 [0.50] Atmospheric Transport and Chemistry

### Ecology (ECOL)

#### College of Biological Science

### Major

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.

#### Semester 1

BIOL\*1030 [0.50] Biology I

CHEM\*1300 [0.50] Introductory Environmental Chemistry

ENVS\*1010 [0.50] Introduction to Environmental Sciences

MATH\*1080 [0.50] Elements of Calculus I

PHYS\*1080 [0.50] Physics for Life Sciences

#### Semester 2

BIOL\*1040 [0.50] Biology II

CHEM\*1310 [0.50] Introductory Environmental Chemistry II

ECON\*1050 [0.50] Introductory Microeconomics

GEOG\*1300 [0.50] Introduction to the Biophysical Environment

PHYS\*1130 [0.50] Physics with Applications

#### Semester 3

BIOL\*2210 [0.50] Introductory Cell Biology

CHEM\*2300 [0.50] Chemical Reactivity

STAT\*2040 [0.50] Statistics I

1.00 core requirements or electives

#### Semester 4

BIOC\*2580 [0.50] Introductory Biochemistry

BIOL\*3110 [0.50] Population Ecology

MBG\*2000 [0.50] Introductory Genetics

STAT\*2050 [0.50] Statistics II

One of:

CIS\*1200 [0.50] Introduction to Computing

CIS\*1500 [0.50] Introduction to Programming

#### Semester 5

BIOL\*3010 [0.50] Laboratory and Field Work in Ecology

BIOL\*3120 [0.50] Community Ecology

One of:

BOT\*3410 [0.50] Plant Anatomy

ZOO\*2070 [0.50] Invertebrate Zoology I

ZOO\*2090 [0.50] Vertebrate Structure and Function

One of:

BOT\*2100 [0.50] Life Strategies of Plants

ZOO\*3200 [0.50] Comparative Animal Physiology I

0.50 core requirements or electives

#### Semester 6

One of:

MBG\*3000 [0.50] Population Genetics

ZOO\*3300 [0.50] Evolution

2.00 core requirements or electives

#### Semester 7

BIOL\*4110 [0.75] Ecological Methods

1.75 core requirements or electives

#### Semester 8

BIOL\*4120 [0.50] Evolutionary Ecology

2.00 core requirements or electives

**Note:** Ecology majors are not required to complete BIOL\*2060 as a core course.

### Ecology (ECOL:C)

#### College of Biological Science

### Major

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.

#### Semester 1 - Fall

BIOL\*1030 [0.50] Biology I

CHEM\*1300 [0.50] Introductory Environmental Chemistry

ENVS\*1010 [0.50] Introduction to Environmental Sciences

MATH\*1080 [0.50] Elements of Calculus I

PHYS\*1080 [0.50] Physics for Life Sciences

### Semester 2 - Winter

BIOL\*1040 [0.50] Biology II

CHEM\*1310 [0.50] Introductory Environmental Chemistry II

COOP\*1100 [0.00] Introduction to Co-operative Education

ECON\*1050 [0.50] Introductory Microeconomics

GEOG\*1300 [0.50] Introduction to the Biophysical Environment

PHYS\*1130 [0.50] Physics with Applications

### Semester 3 - Fall

BIOL\*2210 [0.50] Introductory Cell Biology

CHEM\*2300 [0.50] Chemical Reactivity

STAT\*2040 [0.50] Statistics I

1.00 core requirements or electives

### Winter Semester

COOP\*1000 [0.00] Co-op Work Term I

### Semester 4-Summer

BIOC\*2580 [0.50] Introductory Biochemistry

MBG\*2000 [0.50] Introductory Genetics

STAT\*2050 [0.50] Statistics II

One of:

CIS\*1200 [0.50] Introduction to Computing

CIS\*1500 [0.50] Introduction to Programming

0.50 core requirements or electives

### Fall Semester

COOP\*2000 [0.00] Co-op Work Term II

### Semester 5- Winter

BIOL\*3110 [0.50] Population Ecology

One of:

BOT\*3410 [0.50] Plant Anatomy

ZOO\*2070 [0.50] Invertebrate Zoology I

ZOO\*2090 [0.50] Vertebrate Structure and Function

One of:

BOT\*2100 [0.50] Life Strategies of Plants

ZOO\*3200 [0.50] Comparative Animal Physiology I

1.00 core requirements or electives

### Summer Semester

COOP\*3000 [0.00] Co-op Work Term III

### Semester 6- Fall

BIOL\*3010 [0.50] Laboratory and Field Work in Ecology

BIOL\*3120 [0.50] Community Ecology

One of:

MBG\*3000 [0.50] Population Genetics

ZOO\*3300 [0.50] Evolution

1.50 core requirements or electives

### Semester 7- Winter

BIOL\*4120 [0.50] Evolutionary Ecology

2.00 core requirements or electives

### Summer Semester (Optional)

COOP\*4000 [0.00] Co-op Work Term IV

### Semester 8

BIOL\*4110 [0.75] Ecological Methods

1.75 core requirements or electives

**Note:** Ecology majors are not required to complete BIOL\*2060 as a core course.

### Environmental Economics and Policy (EEP)

#### Department of Economics, College of Social and Applied Human Sciences

#### Department of Agricultural Economics and Business, Ontario Agricultural College

### Major

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.

#### Semester 1

BIOL\*1030 [0.50] Biology I

CHEM\*1300 [0.50] Introductory Environmental Chemistry

ENVS\*1010 [0.50] Introduction to Environmental Sciences

MATH\*1080 [0.50] Elements of Calculus I

PHYS\*1080 [0.50] Physics for Life Sciences

#### Semester 2

BIOL\*1040 [0.50] Biology II

CHEM\*1310 [0.50] Introductory Environmental Chemistry II

ECON\*1050 [0.50] Introductory Microeconomics

GEOG\*1300 [0.50] Introduction to the Biophysical Environment

PHYS\*1130 [0.50] Physics with Applications

**Semester 3**

AGEC*2700	[0.50]	Survey of Natural Resource Economics
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2100	[0.50]	Economic Growth and Environmental Quality
1.00 core requirements, restricted electives or electives		

**Semester 4**

ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2740	[0.50]	Economic Statistics *
1.50 core requirements, restricted electives or electives		

**Semester 5**

AGEC*4290	[0.50]	Land Economics **
ECON*2410	[0.50]	Intermediate Macroeconomics
ECON*2770	[0.50]	Introductory Mathematical Economics
1.00 core requirements, restricted electives or electives		

**Semester 6**

ECON*3740	[0.50]	Introduction to Econometrics
2.00 core requirements, restricted electives or electives		

**Semester 7**

ECON*3710	[0.50]	Advanced Microeconomics ***
ECON*4930	[0.50]	Environmental Economics ***
1.50 core requirements, restricted electives or electives		

**Semester 8**

AGEC*4310	[0.50]	Resource Economics
2.00 core requirements, restricted electives or electives		
* Students may select between ECON*2740 and STAT*2040		
**AGEC*4290 is taught in even-numbered years		
*** students must obtain permission from instructor to take ECON*4930 and ECON*3710 at the same time		

**Restricted Electives**

Students in the Environmental Economics and Policy major are required to choose 2.00 credits additional Agricultural Economics and Business (AGEC\*XXXX) or Economics (ECON\*XXXX). Students are encouraged to seek advice on their choices and are reminded that 6.00 credits of their B.Sc.(Env.) degree must be at the 3000-4000 level.

**Environmental Economics and Policy (EEP:C)**

Department of Economics, College of Social and Applied Human Sciences

Department of Agricultural Economics and Business, Ontario Agricultural College

**Major**

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.

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3 - Fall**

AGEC*2700	[0.50]	Survey of Natural Resource Economics
ECON*1100	[0.50]	Introductory Macroeconomics
ECON*2100	[0.50]	Economic Growth and Environmental Quality
1.00 core requirements, restricted electives or electives		

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2410	[0.50]	Intermediate Macroeconomics
STAT*2040	[0.50]	Statistics I

1.00 core requirements, restricted electives or electives

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

ECON*2770	[0.50]	Introductory Mathematical Economics
2.00 core requirements, restricted electives or electives		

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

AGEC*4290	[0.50]	Land Economics *
ECON*3710	[0.50]	Advanced Microeconomics
1.50 core requirements, restricted electives or electives		

**Semester 7 - Winter**

AGEC*4310	[0.50]	Resource Economics
ECON*3740	[0.50]	Introduction to Econometrics
2.00 core requirements, restricted electives or electives		

**Summer Semester (Optional)**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 8**

ECON*4930	[0.50]	Environmental Economics
2.00 core requirements, restricted electives or electives		
*AGEC*4290 is taught in even-numbered years		

**Restricted Electives**

Students in the Environmental Economics and Policy major are required to choose 2.00 credits additional Agricultural Economics and Business (AGEC\*XXXX) or Economics (ECON\*XXXX). Students are encouraged to seek advice on their choices and are reminded that 6.00 credits of their B.Sc.(Env.) degree must be at the 3000-4000 level.

**Environmental Geography (ENVG)**

Department of Geography, College of Social and Applied Human Sciences

**Major**

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.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3**

GEOG*2000	[0.50]	Geomorphology
GEOG*2460	[0.50]	Analysis in Geography
1.50 core requirements or electives		

**Semester 4**

GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2210	[0.50]	Environment and Resources
GEOG*2480	[0.50]	Mapping and GIS
1.00 core requirements or electives		

**Semester 5**

GEOG*3110	[0.50]	Biotic and Natural Resources
GEOG*3210	[0.50]	Management of the Biophysical Environment *
1.50 core requirements, restricted electives** or electives		

**Semester 6**

GEOG*3480	[0.50]	GIS and Spatial Analysis
2.00 core requirements, restricted electives** or electives		

**Semester 7**

GEOG*4690	[1.00]	Geography Field Research
1.50 core requirements, restricted electives** or electives		
OR		

0.50 credits in Geography at the 3000-4000 level

2.00 core requirements, restricted electives\*\* or electives

**Semester 8**

GEOG*4880	[0.50]	Contemporary Geographic Thought
2.00 core requirements, restricted electives** or electives		

\* Note: Environmental Geography majors are required to complete GEOG\*3210 and (POLS\*3370 or ZOO\*4050).

\*\* students in the Environmental Geography major must take at least 4 additional geography courses at the 3000-4000 level including:

At least one of:		
GEOG*3000	[0.50]	Fluvial Processes
GEOG*3610	[0.50]	Environmental Hydrology

GEOG*3620	[0.50]	Desert Environments
At least two of:		
ENVS*4220	[0.50]	Environmental Impact Assessment
GEOG*3020	[0.50]	Global Environmental Change
GEOG*4110	[0.50]	Environmental Systems Analysis
GEOG*4210	[0.50]	Environmental Resource Analysis

## Environmental Geography (ENVG:C)

Department of Geography, College of Social and Applied Human Sciences

### Major

Please note that not all courses in the "One of:" options are available each semester (F, W, S). Students are strongly encouraged to seek advice from the appropriate advisor when selecting and scheduling courses, **before Semester 3**.

#### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

#### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

#### Semester 3 - Fall

GEOG*2000	[0.50]	Geomorphology
GEOG*2460	[0.50]	Analysis in Geography

1.50 core requirements or electives

#### Winter Semester

COOP*1000	[0.00]	Co-op Work Term I
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#### Semester 4 - Summer

GEOG*2210	[0.50]	Environment and Resources
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2.00 core requirements or electives

#### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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#### Semester 5 - Winter

GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*2480	[0.50]	Mapping and GIS
GEOG*3480	[0.50]	GIS and Spatial Analysis

1.00 core requirements, restricted electives\*\* or electives

#### Summer Semester

COOP*3000	[0.00]	Co-op Work Term III
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#### Semester 6 - Fall

GEOG*3110	[0.50]	Biotic and Natural Resources
GEOG*3210	[0.50]	Management of the Biophysical Environment *

1.50 core requirements, restricted electives\*\* or electives

#### Semester 7 - Winter

GEOG*4880	[0.50]	Contemporary Geographic Thought
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One of:

- 1.50 core requirements, restricted electives \*\* or electives.
- 0.50 credits in Geography at the 3000-4000 level.

2.00 core requirements, restricted electives\*\* or electives

#### Summer Semester

COOP*4000	[0.00]	Co-op Work Term IV
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#### Semester 8 - Fall

GEOG*4690	[1.00]	Geography Field Research
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2.00 core requirements, restricted electives\*\* or electives.

\* Note: Environmental Geography major are required to complete GEOG\*3210 and (POLS\*3370 or ZOO\*4050).

\*\* students in the Environmental Geography major must take at least 4 additional geography courses at the 3000-4000 level including:

At least one of:

GEOG*3000	[0.50]	Fluvial Processes
GEOG*3610	[0.50]	Environmental Hydrology
GEOG*3620	[0.50]	Desert Environments

At least two of:

ENVS*4220	[0.50]	Environmental Impact Assessment
GEOG*3020	[0.50]	Global Environmental Change
GEOG*4110	[0.50]	Environmental Systems Analysis
GEOG*4210	[0.50]	Environmental Resource Analysis

## Environmental Monitoring and Analysis (EMA)

College of Physical and Engineering Science

### Major

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.

#### Semester 1

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

#### Semester 2

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

#### Semester 3

CHEM*2300	[0.50]	Chemical Reactivity
MATH*2080	[0.50]	Elements of Calculus II
MET*2030	[0.50]	Meteorology and Climatology

1.00 core requirements or electives

#### Semester 4

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2480	[0.50]	Analytical Chemistry I
PHYS*2040	[0.50]	Fundamental Electronics and Sensors
STAT*2040	[0.50]	Statistics I

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

#### Semester 5

PHYS*2550	[0.50]	Radiation and the Environment *
STAT*2050	[0.50]	Statistics II
TOX*2000	[0.50]	Principles of Toxicology

1.00 core requirements or electives

#### Semester 6

PHYS*3080	[0.50]	Energy
STAT*3510	[0.50]	Environmental Risk Assessment

One of:

MET*4210	[0.50]	Atmospheric Experimentation and Instrumentation
MET*4300	[0.50]	Atmospheric Transport and Chemistry

1.00 core requirement or electives

#### Semester 7

ENVS*3360	[0.50]	Waste Management and Utilization
TOX*3300	[0.50]	Analytical Toxicology

1.50 core requirement or electives

#### Semester 8

CHEM*4010	[0.50]	Chemistry and Industry
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2.00 core requirement or electives

\* PHYS\*2550 is offered in even numbered years.

## Environmental Monitoring and Analysis (EMA:C)

College of Physical and Engineering Science

### Major

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.

#### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

#### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3 - Fall**

CHEM*2300	[0.50]	Chemical Reactivity
MATH*2080	[0.50]	Elements of Calculus II
MET*2030	[0.50]	Meteorology and Climatology

1.00 core requirements or electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2480	[0.50]	Analytical Chemistry I
STAT*2040	[0.50]	Statistics I

One of:

CIS*1200	[0.50]	Introduction to Computing
CIS*1500	[0.50]	Introduction to Programming

0.50 core requirements or electives

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

PHYS*3080	[0.50]	Energy
STAT*2050	[0.50]	Statistics II

One of:

MET*4210	[0.50]	Atmospheric Experimentation and Instrumentation
MET*4300	[0.50]	Atmospheric Transport and Chemistry

1.00 core requirements or electives

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

ENVS*3360	[0.50]	Waste Management and Utilization
PHYS*2040	[0.50]	Fundamental Electronics and Sensors
PHYS*2550	[0.50]	Radiation and the Environment *
TOX*2000	[0.50]	Principles of Toxicology

0.50 core requirements or electives

**Semester 7 - Winter**

CHEM*4010	[0.50]	Chemistry and Industry
STAT*3510	[0.50]	Environmental Risk Assessment

1.50 core requirements or electives

**Summer Semester (Optional)**

COOP*4000	[0.00]	Co-op Work Term IV
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**Semester 8**

TOX*3300	[0.50]	Analytical Toxicology
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2.00 core requirements or electives

\* PHYS\*2550 is offered in even numbered years.

**Environmental Protection (ENVP)****Department of Environmental Biology, Ontario Agricultural College****Major**

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.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3**

CHEM*2300	[0.50]	Chemical Reactivity
ENVB*2030	[0.50]	Current Issues in Forest Science
STAT*2040	[0.50]	Statistics I

1.00 core requirements or electives

**Semester 4**

BIOC*2580	[0.50]	Introductory Biochemistry
ENVB*2010	[0.50]	Food Production and the Environment

One of:

BOT*2100	[0.50]	Life Strategies of Plants
ZOO*3200	[0.50]	Comparative Animal Physiology I

1.00 core requirements or electives

**Semester 5**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
BIOL*3450	[0.50]	Introduction to Aquatic Environments
MET*2030	[0.50]	Meteorology and Climatology
TOX*2000	[0.50]	Principles of Toxicology

0.50 core requirements or electives

**Semester 6**

ENVB*3030	[0.50]	Pesticides and the Environment
MBG*2000	[0.50]	Introductory Genetics

1.50 core requirements or electives

**Semester 7**

ENVB*3300	[0.50]	Applied Ecology and Environment
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4180	[0.50]	Microbial Processes in Environmental Management
ZOO*4350	[0.50]	Biology of Polluted Waters

0.50 core requirements or electives

**Semester 8**

ENVB*4240	[0.50]	Biological Activity of Pesticides
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2.00 core requirements or electives

**Environmental Protection (ENVP:C)****Department of Environmental Biology, Ontario Agricultural College****Major**

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.

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3 - Fall**

CHEM*2300	[0.50]	Chemical Reactivity
ENVB*2030	[0.50]	Current Issues in Forest Science
STAT*2040	[0.50]	Statistics I

1.00 core requirements or electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

BIOC*2580	[0.50]	Introductory Biochemistry
BIOL*3450	[0.50]	Introduction to Aquatic Environments
MBG*2000	[0.50]	Introductory Genetics

1.00 core requirements or electives

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

ENVB*2010	[0.50]	Food Production and the Environment
ENVB*3030	[0.50]	Pesticides and the Environment

One of:

BOT*2100	[0.50]	Life Strategies of Plants
ZOO*3200	[0.50]	Comparative Animal Physiology I

1.00 core requirements or electives

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

BIOC*3560	[0.50]	Structure and Function in Biochemistry
ENVB*3300	[0.50]	Applied Ecology and Environment
MET*2030	[0.50]	Meteorology and Climatology
TOX*2000	[0.50]	Principles of Toxicology

0.50 core requirements or electives

**Semester 7 - Winter**

ENVB*4240	[0.50]	Biological Activity of Pesticides
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2.00 core requirements or electives

Summer Semester - (Optional)

COOP\*4000 [0.00] Co-op Work Term IV

Semester 8 - Fall

MICR\*4140 [0.50] Soil Microbiology and Biotechnology  
MICR\*4180 [0.50] Microbial Processes in Environmental Management  
ZOO\*4350 [0.50] Biology of Polluted Waters  
1.00 core requirements or electives

Environmetrics (ENVM)

Department of Mathematics and Statistics, College of Physical and Engineering Science

Department of Computing and Information Science, College of Physical and Engineering Science

Major

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.

Semester 1

BIOL\*1030 [0.50] Biology I  
CHEM\*1300 [0.50] Introductory Environmental Chemistry  
ENVS\*1010 [0.50] Introduction to Environmental Sciences  
MATH\*1080 [0.50] Elements of Calculus I  
PHYS\*1080 [0.50] Physics for Life Sciences

Semester 2

BIOL\*1040 [0.50] Biology II  
CHEM\*1310 [0.50] Introductory Environmental Chemistry II  
ECON\*1050 [0.50] Introductory Microeconomics  
GEOG\*1300 [0.50] Introduction to the Biophysical Environment  
PHYS\*1130 [0.50] Physics with Applications

Semester 3

CIS\*1500 [0.50] Introduction to Programming  
STAT\*2040 [0.50] Statistics I

One of:

MATH\*1210 [0.50] Calculus II  
MATH\*2080 [0.50] Elements of Calculus II

1.00 core requirements, restricted electives or electives

Note: Students in the Environmetrics major must consult the Environmetrics Faculty Advisor for course scheduling in semester 4 through 8.

Semester 4

MATH\*2130 [0.50] Numerical Methods  
MATH\*2170 [0.50] Differential Equations I  
STAT\*2050 [0.50] Statistics II

One of:

MATH\*2150 [0.50] Applied Matrix Algebra  
MATH\*2160 [0.50] Linear Algebra I

Note: MATH\*2160 is preferred for mathematics emphasis.

0.50 core requirements, restricted electives or electives

Semester 5

2.50 core requirements, restricted electives or electives

Semester 6

MATH\*3510 [0.50] Biomathematics  
STAT\*3510 [0.50] Environmental Risk Assessment

1.50 core requirements, restricted electives or electives

Semester 7

2.50 core requirements, restricted electives or electives

Semester 8

2.50 core requirements, restricted electives or electives

Restricted Electives

Students in the Environmetrics major are required to choose 3.50 credits of restricted electives. A minimum of 2.50 credits must be at the 3000/4000 level and of these a minimum of 1.00 must be at the 4000 level.

List

MATH\*2200 [0.50] Advanced Calculus I  
MATH\*2210 [0.50] Advanced Calculus II  
MATH\*3100 [0.50] Differential Equations II  
MATH\*3170 [0.50] Partial Differential Equations and Special Functions  
MATH\*3240 [0.50] Operations Research  
MATH\*4430 [0.50] Advanced Numerical Methods  
MATH\*4070 [0.50] Case Studies in Modeling  
MATH\*4510 [0.50] Environmental Transport and Dynamics  
STAT\*3100 [0.50] Introductory Mathematical Statistics I  
STAT\*3110 [0.50] Introductory Mathematical Statistics II  
STAT\*3240 [0.50] Applied Regression Analysis

STAT\*3320 [0.50] Sampling Theory with Applications  
STAT\*4350 [0.50] Applied Multivariate Statistical Methods  
STAT\*4510 [0.50] Advanced Risk Analysis  
STAT\*4340 [0.50] Statistical Inference  
STAT\*4360 [0.50] Applied Time Series Analysis  
CIS\*1900 [0.50] Discrete Structures in Computer Science  
CIS\*2430 [0.50] Object Oriented Programming  
CIS\*2460 [0.50] Modelling of Computer Systems  
CIS\*2500 [0.50] Intermediate Programming  
CIS\*2520 [0.50] Data Structures  
CIS\*2750 [0.75] Software Systems Development and Integration  
CIS\*3460 [0.50] System Simulation  
CIS\*3490 [0.50] The Analysis and Design of Computer Algorithms  
CIS\*3530 [0.50] Data Base Systems and Concepts

Environmetrics (ENVM:C)

Department of Mathematics and Statistics, College of Physical and Engineering Science

Department of Computing and Information Science, College of Physical and Engineering Science

Major

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.

Semester 1 - Fall

BIOL\*1030 [0.50] Biology I  
CHEM\*1300 [0.50] Introductory Environmental Chemistry  
ENVS\*1010 [0.50] Introduction to Environmental Sciences  
MATH\*1080 [0.50] Elements of Calculus I  
PHYS\*1080 [0.50] Physics for Life Sciences

Semester 2 - Winter

BIOL\*1040 [0.50] Biology II  
CHEM\*1310 [0.50] Introductory Environmental Chemistry II  
COOP\*1100 [0.00] Introduction to Co-operative Education  
ECON\*1050 [0.50] Introductory Microeconomics  
GEOG\*1300 [0.50] Introduction to the Biophysical Environment  
PHYS\*1130 [0.50] Physics with Applications

Semester 3 - Fall

CIS\*1500 [0.50] Introduction to Programming  
STAT\*2040 [0.50] Statistics I

One of:

MATH\*1210 [0.50] Calculus II  
MATH\*2080 [0.50] Elements of Calculus II

1.00 core requirements, restricted electives or electives

Note: Students in the Environmetrics major must consult the Environmetrics Faculty Advisor for course scheduling in semester 4 through 8.

Winter Semester

COOP\*1000 [0.00] Co-op Work Term I

Semester 4 - Summer

MATH\*2130 [0.50] Numerical Methods  
MATH\*2170 [0.50] Differential Equations I  
STAT\*2050 [0.50] Statistics II

1.00 core requirements, restricted electives or electives

Fall Semester

COOP\*2000 [0.00] Co-op Work Term II

Semester 5 - Winter

STAT\*3510 [0.50] Environmental Risk Assessment

One of:

MATH\*2150 [0.50] Applied Matrix Algebra  
MATH\*2160 [0.50] Linear Algebra I

Note: MATH\*2160 is preferred for mathematics emphasis

1.50 core requirements, restricted electives or electives

Summer Semester

COOP\*3000 [0.00] Co-op Work Term III

Semester 6 - Fall

2.50 core requirements, restricted electives or electives

Semester 7 - Winter

MATH\*3510 [0.50] Biomathematics  
2.00 core requirements, restricted electives or electives

Summer Semester (Optional)

COOP\*4000 [0.00] Co-op Work Term IV

Semester 8

2.50 core requirements, restricted electives or electives

**Restricted Electives**

Students in the Environmetrics major are required to choose 3.50 credits of restricted electives. A minimum of 2.50 credits must be at the 3000/4000 level and of these a minimum of 1.00 must be at the 4000 level.

**List**

MATH*2200	[0.50]	Advanced Calculus I
MATH*2210	[0.50]	Advanced Calculus II
MATH*3100	[0.50]	Differential Equations II
MATH*3170	[0.50]	Partial Differential Equations and Special Functions
MATH*3240	[0.50]	Operations Research
MATH*4430	[0.50]	Advanced Numerical Methods
MATH*4070	[0.50]	Case Studies in Modeling
MATH*4510	[0.50]	Environmental Transport and Dynamics
STAT*3100	[0.50]	Introductory Mathematical Statistics I
STAT*3110	[0.50]	Introductory Mathematical Statistics II
STAT*3240	[0.50]	Applied Regression Analysis
STAT*3320	[0.50]	Sampling Theory with Applications
STAT*4350	[0.50]	Applied Multivariate Statistical Methods
STAT*4510	[0.50]	Advanced Risk Analysis
STAT*4340	[0.50]	Statistical Inference
STAT*4360	[0.50]	Applied Time Series Analysis
CIS*1900	[0.50]	Discrete Structures in Computer Science
CIS*2430	[0.50]	Object Oriented Programming
CIS*2460	[0.50]	Modelling of Computer Systems
CIS*2500	[0.50]	Intermediate Programming
CIS*2520	[0.50]	Data Structures
CIS*2750	[0.75]	Software Systems Development and Integration
CIS*3460	[0.50]	System Simulation
CIS*3490	[0.50]	The Analysis and Design of Computer Algorithms
CIS*3530	[0.50]	Data Base Systems and Concepts

**Natural Resources Management (NRM)****Department of Land Resource Science, Ontario Agricultural College****Major**

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.

In this major there are fees charged to cover partial costs of some field trips. Students in need of financial assistance should approach the Chair of the department offering the course.

**Semester 1**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3**

MET*2030	[0.50]	Meteorology and Climatology
SOIL*2120	[0.50]	Introduction to Environmental Stewardship
STAT*2040	[0.50]	Statistics I

1.00 core requirements, restricted electives or electives

Note: GEOG\*2460 may be substituted for STAT\*2040.

**Semester 4**

SOIL*2010	[0.50]	Soil Science
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2.00 core requirements, restricted electives or electives

**Semester 5**

ENVB*2030	[0.50]	Current Issues in Forest Science
SOIL*3050	[0.50]	Land Utilization
SOIL*3080	[0.50]	Soil and Water Conservation

1.00 core requirements, restricted electives or electives

**Semester 6**

SOIL*3100	[0.50]	Resource Planning Techniques
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One of:

ENGG*2550	[0.50]	Water Management
GEOG*3610	[0.50]	Environmental Hydrology
GEOL*3060	[0.50]	Groundwater

1.50 core requirements, restricted electives or electives

**Semester 7**

SOIL*4110	[0.50]	Natural Resources Management Field Camp
ZOO*4110	[0.50]	Principles of Fish and Wild Life Management

1.50 core requirements, restricted electives or electives  
Note: BIOL\*4150 may be substituted for ZOO\*4110.

**Semester 8**

2.50 core requirements, restricted electives or electives

**Restricted Electives**

Students in the Natural Resources Management major are required to choose 1.50 restricted elective credits from the following list:

CROP*2280	[0.50]	Crops in Land Reclamation
ENVB*3000	[0.50]	Nature Interpretation
ENVB*4780	[0.50]	Forest Ecology
ENVS*3320	[0.50]	Principles of Landscape Ecology
ENVS*4220	[0.50]	Environmental Impact Assessment
GEOG*2420	[0.50]	Aerial-photo Interpretation
GEOG*3210	[0.50]	Management of the Biophysical Environment
GEOG*3480	[0.50]	GIS and Spatial Analysis
GEOL*3130	[0.50]	Agrogeology
LARC*4520	[0.50]	Park and Recreation Administration
MET*3050	[0.50]	Microclimatology
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3170	[0.50]	Soil Processes in Landscape
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*3600	[0.50]	Remote Sensing

**Natural Resources Management (NRM:C)****Department of Land Resource Science, Ontario Agricultural College****Major**

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.

In this major there are fees charged to cover partial costs of some field trips. Students in need of financial assistance should approach the Chair of the department offering the course.

**Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
CHEM*1300	[0.50]	Introductory Environmental Chemistry
ENVS*1010	[0.50]	Introduction to Environmental Sciences
MATH*1080	[0.50]	Elements of Calculus I
PHYS*1080	[0.50]	Physics for Life Sciences

**Semester 2 - Winter**

BIOL*1040	[0.50]	Biology II
CHEM*1310	[0.50]	Introductory Environmental Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
ECON*1050	[0.50]	Introductory Microeconomics
GEOG*1300	[0.50]	Introduction to the Biophysical Environment
PHYS*1130	[0.50]	Physics with Applications

**Semester 3 - Fall**

ENVB*2030	[0.50]	Current Issues in Forest Science
MET*2030	[0.50]	Meteorology and Climatology
SOIL*2120	[0.50]	Introduction to Environmental Stewardship

1.00 core requirements, restricted electives or electives

**Winter Semester**

COOP*1000	[0.00]	Co-op Work Term I
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**Semester 4 - Summer**

SOIL*2010	[0.50]	Soil Science
STAT*2040	[0.50]	Statistics I

1.50 core requirements, restricted electives or electives

Note: GEOG\*2460 may be substituted for STAT\*2040.

**Fall Semester**

COOP*2000	[0.00]	Co-op Work Term II
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**Semester 5 - Winter**

One of:

ENGG*2550	[0.50]	Water Management
GEOG*3610	[0.50]	Environmental Hydrology
GEOL*3060	[0.50]	Groundwater

2.00 core requirements, restricted electives or electives

**Summer Semester**

COOP*3000	[0.00]	Co-op Work Term III
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**Semester 6 - Fall**

SOIL*3050	[0.50]	Land Utilization
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SOIL\*3080 [0.50] Soil and Water Conservation  
1.50 core requirements, restricted electives or electives

### Semester 7 - Winter

2.50 core requirements, restricted electives or electives

### Summer Semester (Optional)

COOP\*4000 [0.00] Co-op Work Term IV

### Semester 8 - Fall

SOIL\*4110 [0.50] Natural Resources Management Field Camp  
ZOO\*4110 [0.50] Principles of Fish and Wild Life Management

1.50 core requirements, restricted electives or electives

Note: BIOL\*4150 may be substituted for ZOO\*4110.

### Restricted Electives

Students in the Natural Resources Management major are required to choose 1.50 restricted elective credits from the following list:

CROP*2280	[0.50]	Crops in Land Reclamation
ENVB*3000	[0.50]	Nature Interpretation
ENVB*4780	[0.50]	Forest Ecology
ENVS*3320	[0.50]	Principles of Landscape Ecology
ENVS*4220	[0.50]	Environmental Impact Assessment
GEOG*2420	[0.50]	Aerial-photo Interpretation
GEOG*3210	[0.50]	Management of the Biophysical Environment
GEOG*3480	[0.50]	GIS and Spatial Analysis
GEOL*3130	[0.50]	Agrogeology
LARC*4520	[0.50]	Park and Recreation Administration
MET*3050	[0.50]	Microclimatology
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3170	[0.50]	Soil Processes in Landscape
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*3600	[0.50]	Remote Sensing

### Areas of Emphasis

All students must choose an area of emphasis consisting of a minimum of 2.50 credits in a particular topic area. The sequence of courses normally begins in third year. With the approval of the program counsellor, students may develop their own area of emphasis. All areas of emphasis must be approved by the program counsellor. Students should note that entry to certain areas of emphasis is restricted by the student's choice of major. Thus program approval should be gained before registering in courses to count towards their area of emphasis.

### Atmospheric Resources (AR)

MET\*2030 [0.50] Meteorology and Climatology

Four of:

GEOG*2110	[0.50]	Climate and the Biophysical Environment
MET*2020	[0.50]	Agrometeorology
MET*3050	[0.50]	Microclimatology
MET*4210	[0.50]	Atmospheric Experimentation and Instrumentation
MET*4300	[0.50]	Atmospheric Transport and Chemistry

### Biotic Systems (BS)

BIOL\*3110 [0.50] Population Ecology

BIOL\*3120 [0.50] Community Ecology

Three of:

BIOL*3010	[0.50]	Laboratory and Field Work in Ecology
BIOL*3130	[0.50]	Conservation Biology
BIOL*3450	[0.50]	Introduction to Aquatic Environments
BOT*2050	[0.50]	Plant Ecology
ENVB*4780	[0.50]	Forest Ecology
MBG*2000	[0.50]	Introductory Genetics
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
ZOO*4350	[0.50]	Biology of Polluted Waters

### Crop Ecology (CE)

ENVB\*2010 [0.50] Food Production and the Environment

Four of:

CROP*2110	[0.50]	Crop Ecology
CROP*2280	[0.50]	Crops in Land Reclamation
CROP*4220	[0.50]	Cropping Systems
CROP*4240	[0.50]	Weed Science
CROP*4340	[0.50]	Seminar: Selected Topics in Crop Science
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3030	[0.50]	Pesticides and the Environment
GEOG*3320	[0.50]	Agriculture and Society
SOIL*2010	[0.50]	Soil Science

### Development and Stewardship (DS)

SOIL\*2120 [0.50] Introduction to Environmental Stewardship  
and 4 courses from List A or List B:

### List A

AGEC*4210	[0.50]	World Agriculture and Economic Development
IDEV*2010	[0.50]	International Development Studies
REXT*4020	[0.50]	Rural Extension in Change and Development

### List B

GEOG*4390	[0.50]	Seminar in Rural Geography
LARC*2820	[0.50]	Urban and Regional Planning
SOIL*3050	[0.50]	Land Utilization

### Environmental Administration (EA)

GEOG*3210	[0.50]	Management of the Biophysical Environment
HAF*4390	[0.50]	Individuals and Groups in Organizations

Three of:

HAF*3000	[0.50]	Human Resources Management
LARC*2820	[0.50]	Urban and Regional Planning
MCS*2020	[0.50]	Information Management
POLS*2250	[0.50]	Public Administration
POLS*3250	[0.50]	Public Policy: Challenges and Prospects
REXT*3040	[0.50]	Communication Process

### Environmental Degradation (ED)

Three of:

ENGG*2550	[0.50]	Water Management
ENVS*3360	[0.50]	Waste Management and Utilization
MICR*4180	[0.50]	Microbial Processes in Environmental Management
SOIL*3200	[0.50]	Environmental Soil Biology
TOX*2000	[0.50]	Principles of Toxicology
ZOO*4350	[0.50]	Biology of Polluted Waters

Two of:

BIOL*3010	[0.50]	Laboratory and Field Work in Ecology
CROP*2280	[0.50]	Crops in Land Reclamation
GEOG*3110	[0.50]	Biotic and Natural Resources
SOIL*3050	[0.50]	Land Utilization
SOIL*3080	[0.50]	Soil and Water Conservation

### Environmental Economics and Policy (EEP)

ECON\*1100 [0.50] Introductory Macroeconomics

One of:

AGEC*2700	[0.50]	Survey of Natural Resource Economics
ECON*2100	[0.50]	Economic Growth and Environmental Quality

Note: Whichever course of AGECE\*2100 or AGECE\*2700 is not taken for the Environmental Sciences core is required for this area of emphasis.

Three of:

AGEC*4290	[0.50]	Land Economics
AGEC*4310	[0.50]	Resource Economics
ECON*2310	[0.50]	Intermediate Microeconomics
ECON*2650	[0.50]	Introductory Development Economics
ECON*3580	[0.50]	Economics of Regulation
ECON*4930	[0.50]	Environmental Economics

Note: Additional prerequisites are needed for ECON\*4930.

### Environmental Impact Assessment (EIA)

ENVS\*4220 [0.50] Environmental Impact Assessment

STAT\*3510 [0.50] Environmental Risk Assessment

One of:

ENGG*3340	[0.50]	Geographic Information Systems in Environmental Engineering
GEOG*3480	[0.50]	GIS and Spatial Analysis

Two of:

BIOL*3450	[0.50]	Introduction to Aquatic Environments
GEOG*4110	[0.50]	Environmental Systems Analysis
GEOL*3190	[0.50]	Environmental Water Chemistry
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants
PHYS*3080	[0.50]	Energy
TOX*2000	[0.50]	Principles of Toxicology
ZOO*4350	[0.50]	Biology of Polluted Waters

Note: Additional prerequisites are needed for GEOG\*3480 and STAT\*3510.

### Environmental Management in the U.S. (EMUS)

This Area of Emphasis is undertaken at Bowling Green State University, Ohio.

Students are strongly encouraged to undertake an internship (for University of Guelph credit) at a location/agency in the U.S. to be approved jointly by Bowling Green State University (Center for Environmental Programs) and the University of Guelph (Associate Dean's Office, Faculty of Environmental Sciences). The internship is undertaken upon the completion of the courses at Bowling Green State University.

At least 2 of the following BGSU courses:

ENVS301	- Environmental Problems (3 cr.)
ENVS401	- Environmental Strategies (2 cr.)
ENVS402	- Environmental Impact Statements (3 cr.)

At least 2 of the following BGSU courses:

POLS302 - American Domestic Public Policy (3 cr.)

POLS303 - Introduction to Public Administration (3 cr.)

POLS331 - State and Local Government (3 cr.)

POLS336 - Environmental Policy and Politics (3 cr.)

Students must complete at least 15 BGSU credits. Upon completion of the U.S. internship, students will receive credit for ENVS\*3100.

### Land Resources (LR)

GEOG*2000	[0.50]	Geomorphology
GEOL*1050	[0.50]	Geology and the Environment
SOIL*2010	[0.50]	Soil Science

Two of:

GEOL*2200	[0.50]	Glacial Geology
GEOL*3130	[0.50]	Agrogeology
MET*2030	[0.50]	Meteorology and Climatology
SOIL*3080	[0.50]	Soil and Water Conservation
SOIL*3170	[0.50]	Soil Processes in Landscape

### Landscape Ecology (LE)

ENVS*3320	[0.50]	Principles of Landscape Ecology
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Four of:

BIOL*3010	[0.50]	Laboratory and Field Work in Ecology
BIOL*4150	[0.50]	Wildlife Conservation and Management
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*4780	[0.50]	Forest Ecology
GEOG*2000	[0.50]	Geomorphology
GEOG*2110	[0.50]	Climate and the Biophysical Environment
GEOG*4110	[0.50]	Environmental Systems Analysis
LARC*2100	[0.50]	Landscape Analysis
SOIL*2010	[0.50]	Soil Science
SOIL*3080	[0.50]	Soil and Water Conservation
ZOO*4110	[0.50]	Principles of Fish and Wild Life Management

### Mathematical Modelling and Risk Assessment (MMRA)

MATH*2150	[0.50]	Applied Matrix Algebra
MATH*2170	[0.50]	Differential Equations I
MATH*3510	[0.50]	Biomathematics
STAT*2050	[0.50]	Statistics II
STAT*3510	[0.50]	Environmental Risk Assessment

One of:

MATH*2080	[0.50]	Elements of Calculus II
STAT*2040	[0.50]	Statistics I

If any of the above are included in the student's major, then one of the following must be taken:

CIS*2650	[0.50]	Programming II
MATH*2130	[0.50]	Numerical Methods
STAT*3240	[0.50]	Applied Regression Analysis

### Water Resources (WR)

GEOL*3060	[0.50]	Groundwater
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One of:

ENGG*3650	[0.50]	Hydrology
GEOG*3610	[0.50]	Environmental Hydrology

Three of:

BIOL*3450	[0.50]	Introduction to Aquatic Environments
ENGG*2550	[0.50]	Water Management
GEOG*3000	[0.50]	Fluvial Processes
GEOL*3190	[0.50]	Environmental Water Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics

## Bachelor of Science in Technology [B.Sc.(Tech.)]

The B.Sc.(Tech.) program was designed for students who do not intend to pursue post-graduate studies and are strongly focused on securing industrial employment that makes use of the knowledge acquired in their bachelors degree. This program provides students with the knowledge and skills deemed to be essential by employers and exemplifies the positive benefits of cooperation between colleges and universities. The program combines rigorous theory with practical applications.

For the B.Sc.(Tech.) degree the University offers an honours program requiring the equivalent of 8 semesters of successful full-time study. Two of the semesters will be located at Seneca College in Toronto. The program requires the completion of four co-op work-terms. Students are encouraged to study full-time and to follow the schedule of studies listed below. In the B.Sc.(Tech.) program, 2.50 credits per semester is the normal load for a regular full-time student.

### Program Information

Students are required to follow the pattern of study for one of the two majors offered (Applied Pharmaceutical Chemistry or Physics and Technology) and complete all of the required courses specified in the Schedule of Studies.

Courses taught by Seneca College are noted in the schedule of studies. The course descriptions are in this calendar however detailed course profiles can be accessed through the Seneca College home page.

### Entry Credits

In general, the 4U or OAC 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
- PHYS\*1020 for students lacking in physics

Not more than one of the above will be allowed for credit toward the B.Sc.(Tech.) degree.

### Continuation of Study

Students are advised to consult the University's regulations for continuation of study which are outlined in detail in Section VIII--Undergraduate Degree Regulations & Procedures. In addition to the University regulations, students will also be required to achieve a 70% cumulative average by the end of semester 2 due to the required co-op component within this program. Students will be evaluated after semester 2 and those students who have a cumulative average less than 70% but meet the Guelph continuation of study requirements will be withdrawn from the B.Sc.(Tech.) program. Under these circumstances, students in the Applied Pharmaceutical Chemistry major will be automatically moved to B.Sc. Biological Chemistry and those students in the Physics and Technology major will be automatically moved to the B.Sc. Physics major. Students should contact their Program Counsellor regarding co-op appeal procedures.

Note: Students who voluntarily withdraw from co-op will be moved to the B.Sc. majors specified above.

### Honours Minors

Students may wish to add a minor to their major. 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. It may also require certain specified courses. Given the intended technical training of this degree, students have very little flexibility in terms of electives. As such, students wishing to add a minor would be required to enrol in additional semesters of study. Students wishing to take a minor should consult with their program counsellor.

### Conditions for Graduation

In order to qualify for graduation from the B.Sc.(Tech.) program, the student must have successfully completed all of the courses approved for the program, achieved a 60%, or higher, cumulative average and received a minimum grade of satisfactory for the co-op work reports and work performance evaluations.

### Applied Pharmaceutical Chemistry (APPC:C)

Department of Chemistry, College of Physical and Engineering Science

#### Major (Honours Program)

This major will require the completion of 20.25 credits as indicated below:

##### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics
XSEN*2010	[0.50]	Effective Business and Technical Writing

##### Semester 2 - Winter

BIOL*1040	[0.50]	Biology II
CHEM*1050	[0.50]	General Chemistry II
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II

PHYS\*1010 [0.50] Introductory Electricity and Magnetism  
0.50 credits from an Arts/Social Science electives

##### Semester 3 - Fall

CHEM*2060	[0.50]	Structure and Bonding
CHEM*2400	[0.75]	Analytical Chemistry I
CHEM*2880	[0.50]	Physical Chemistry
CIS*1200	[0.50]	Introduction to Computing
STAT*2040	[0.50]	Statistics I

##### Winter Semester

COOP*1000	[0.00]	Co-op Work Term I
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##### Semester 4 - Summer

BIOC*2580	[0.50]	Introductory Biochemistry
CHEM*2070	[0.50]	Structure and Spectroscopy
CHEM*2700	[0.50]	Organic Chemistry I
MICR*2030	[0.50]	Microbial Growth

0.50 electives

##### Fall Semester

COOP*2000	[0.00]	Co-op Work Term II
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##### Semester 5 - Winter

XSEN*2020	[0.50]	Management Studies: Business and Human Relations
XSEN*3020	[0.50]	Pharmaceutical Analysis
XSEN*3030	[0.50]	Pharmacology and Applied Toxicology
XSEN*3040	[0.50]	Occupational Health and Chemistry
XSEN*4050	[0.50]	Biopharmaceuticals

Note: All courses in Semester 5 are taught at Seneca College in Toronto.

##### Semester 6 - Summer

BIOC*3570	[0.50]	Analytical Biochemistry
CHEM*3360	[0.50]	Environmental Chemistry and Toxicology
CHEM*3430	[0.50]	Analytical Chemistry II: Instrumental Analysis
CHEM*3750	[0.50]	Organic Chemistry II

0.50 electives

##### Fall Semester

COOP*3000	[0.00]	Co-op Work Term III
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##### Semester 7 - Winter

XSEN*3060	[0.50]	Pharmaceutical Analysis - Advanced
XSEN*4010	[0.50]	Pharmaceutical Calculations
XSEN*4020	[0.50]	Pharmaceutical Organic Chemistry
XSEN*4030	[0.50]	Pharmaceutical Product Formulations
XSEN*4040	[0.50]	Pharmaceutical Manufacturing

Note: All courses in Semester 7 are taught at Seneca College in Toronto.

##### Summer Semester

COOP*4000	[0.00]	Co-op Work Term IV
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##### Semester 8 - Fall

CHEM*3440	[0.50]	Analytical Chemistry III: Analytical Instrumentation
CHEM*4730	[0.50]	Synthetic Organic Chemistry

One of:

BIOC*4520	[0.50]	Metabolic Processes
BIOC*4550	[0.50]	Biochemistry and Structure of Macromolecules
BIOC*4570	[0.50]	Applied Biochemistry
CHEM*3640	[0.50]	Chemistry of the Elements I

One of:

BIOM*3100	[0.50]	Mammalian Physiology I
HK*3940	[1.25]	Human Physiology
MBG*2000	[0.50]	Introductory Genetics
PATH*3610	[0.50]	Principles of Disease

0.50 electives

### Physics and Technology (PHTC:C)

Department of Physics, College of Physical and Engineering Science

#### Major (Honours Program)

Two streams are available. Stream A is different from Stream B in that Stream B offers a double work term following academic semester 6. This major will require the completion of 21.00 credits as indicated below:

##### Stream A

##### Semester 1 - Fall

BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics

##### Semester 2 - Winter

CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education

MATH*1210	[0.50]	Calculus II
PHYS*1010	[0.50]	Introductory Electricity and Magnetism
PHYS*2040	[0.50]	Fundamental Electronics and Sensors
One of:		
CIS*1910	[0.50]	Discrete Structures in Computing I *
0.50 electives		
* CIS*1910 is a prerequisite for many upper level C.I.S. courses		
<b>Semester 3 - Fall</b>		
MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I
One of:		
CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2910	[0.50]	Discrete Structures in Computing II
0.50 electives		
<b>Winter Semester</b>		
COOP*1000	[0.00]	Co-op Work Term I
<b>Semester 4 - Summer</b>		
MATH*2170	[0.50]	Differential Equations I
PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
STAT*2040	[0.50]	Statistics I
One of:		
CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2100	[0.50]	Scientific Computing and Applications Development
CIS*2520	[0.50]	Data Structures
CIS*3120	[0.50]	Digital Systems
0.50 electives		
<b>Fall Semester</b>		
COOP*2000	[0.00]	Co-op Work Term II
<b>Semester 5 - Winter</b>		
XSEN*3100	[0.50]	Analog and Digital Communications
XSEN*3120	[0.50]	Microprocessors I
XSEN*3130	[0.50]	Object Oriented Programming Using C++
XSEN*3140	[0.50]	Operating Systems
XSEN*4130	[0.50]	Networking Essentials
Note: All courses in Semester 5 are taught at Seneca College in Toronto.		
<b>Summer Semester</b>		
COOP*3000	[0.00]	Co-op Work Term III
<b>Semester 6 - Fall</b>		
XSEN*4100	[0.50]	Event Driven Programming and Visual Basic
XSEN*4110	[0.50]	Data Acquisition and Control
XSEN*4120	[0.50]	Data Communications I
XSEN*4140	[0.50]	Technical and Personal Communications
One of:		
XSEN*4150	[0.50]	Microprocessors II
XSEN*4160	[0.50]	Computer Peripheral Systems
<b>Semester 7 - Winter</b>		
PHYS*2450	[0.75]	Mechanics II
PHYS*2470	[0.75]	Electricity and Magnetism II
PHYS*3220	[0.50]	Waves and Optics
One of:		
CIS*3120	[0.50]	Digital Systems
0.50 electives		
<b>Summer Semester</b>		
COOP*4000	[0.00]	Co-op Work Term IV
<b>Semester 8 - Fall</b>		
MATH*3100	[0.50]	Differential Equations II
PHYS*3230	[0.50]	Quantum Mechanics I
PHYS*3240	[0.50]	Statistical Physics I
PHYS*4500	[0.50]	Advanced Physics Laboratory
0.50 electives		
<b>Note:</b> At least 0.50 in electives must be taken from courses in the Arts or Social Sciences.		
<b>Stream B</b>		
<b>Semester 1 - Fall</b>		
BIOL*1030	[0.50]	Biology I
CHEM*1040	[0.50]	General Chemistry I
CIS*1500	[0.50]	Introduction to Programming
MATH*1200	[0.50]	Calculus I
PHYS*1000	[0.50]	An Introduction to Mechanics
<b>Semester 2 - Winter</b>		
CIS*2500	[0.50]	Intermediate Programming
COOP*1100	[0.00]	Introduction to Co-operative Education
MATH*1210	[0.50]	Calculus II

PHYS*1010	[0.50]	Introductory Electricity and Magnetism
PHYS*2040	[0.50]	Fundamental Electronics and Sensors
One of:		
CIS*1910	[0.50]	Discrete Structures in Computing I *
0.50 electives		
*CIS*1910 is a prerequisite for many upper level C.I.S. courses		
<b>Semester 3 - Fall</b>		
MATH*2160	[0.50]	Linear Algebra I
MATH*2200	[0.50]	Advanced Calculus I
PHYS*2440	[0.75]	Mechanics I
PHYS*2460	[0.75]	Electricity and Magnetism I
One of:		
CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2910	[0.50]	Discrete Structures in Computing II
0.50 electives		
<b>Winter Semester</b>		
COOP*1000	[0.00]	Co-op Work Term I
<b>Semester 4 - Summer</b>		
MATH*2170	[0.50]	Differential Equations I
PHYS*2260	[0.50]	Experimental Basis of Quantum Physics
STAT*2040	[0.50]	Statistics I
One of:		
CIS*2030	[0.50]	Structure and Application of Microcomputers
CIS*2100	[0.50]	Scientific Computing and Applications Development
CIS*2520	[0.50]	Data Structures
CIS*3120	[0.50]	Digital Systems
0.50 electives		
<b>Semester 5 - Fall</b>		
XSEN*3100	[0.50]	Analog and Digital Communications
XSEN*3120	[0.50]	Microprocessors I
XSEN*3130	[0.50]	Object Oriented Programming Using C++
XSEN*3140	[0.50]	Operating Systems
XSEN*4130	[0.50]	Networking Essentials
Note: All courses in Semester 5 are taught at Seneca College in Toronto.		
<b>Semester 6 - Winter</b>		
XSEN*4100	[0.50]	Event Driven Programming and Visual Basic
XSEN*4110	[0.50]	Data Acquisition and Control
XSEN*4120	[0.50]	Data Communications I
XSEN*4140	[0.50]	Technical and Personal Communications
One of:		
XSEN*4150	[0.50]	Microprocessors II
XSEN*4160	[0.50]	Computer Peripheral Systems
Note: All courses in Semester 6 are taught at Seneca College in Toronto.		
<b>Summer Semester</b>		
COOP*2000	[0.00]	Co-op Work Term II
<b>Fall Semester</b>		
COOP*3000	[0.00]	Co-op Work Term III
<b>Semester 7 - Winter</b>		
PHYS*2450	[0.75]	Mechanics II
PHYS*2470	[0.75]	Electricity and Magnetism II
PHYS*3220	[0.50]	Waves and Optics
One of:		
CIS*3120	[0.50]	Digital Systems
0.50 electives		
<b>Summer Semester</b>		
COOP*4000	[0.00]	Co-op Work Term IV
<b>Semester 8 - Fall</b>		
MATH*3100	[0.50]	Differential Equations II
PHYS*3230	[0.50]	Quantum Mechanics I
PHYS*3240	[0.50]	Statistical Physics I
PHYS*4500	[0.50]	Advanced Physics Laboratory
0.50 electives		
<b>Note:</b> At least 0.50 in electives must be taken from courses in the Arts or Social Sciences.		

## 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 8 semesters to complete. The college is accredited by the Canadian Veterinary Medical Association, the 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.

**Students entering the D.V.M. Program prior to Fall 2000 should refer to the undergraduate calendar for their year of program entry for appropriate course listings.**

### 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. The ability to relate to people is an acquired skill that must be encouraged during the program of study.
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.

### Academic Counselling

The Office of the Assistant Dean for Student Affairs 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 Assistant 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 or her academic difficulties.

Students on probation are required to meet regularly with the Assistant Dean so that the student's academic progress is monitored and resource information and assistance is provided to the student. As an aid to improving their academic efficiency all students whose program average (PA) is between 60% and 70% will be sent a letter from the Assistant Dean outlining resources available to them.

### 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.

This Continuation of Study Policy applies to students entering the D.V.M. Program in Fall 2000 and subsequent semesters. For continuation of study, a student must satisfy the conditions as presented below. In order to graduate, students must fulfill the course requirements for the program and have achieved at least a 60% program average. 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 courses, and in light of the student's particular circumstances (see VIII--Undergraduate Degree Regulations and Procedures).

Students entering the D.V.M. Program prior to Fall 2000 should consult the Undergraduate Program for the year in which they entered the Program.

### Full-time Study

The D.V.M. program is offered as a full-time program and normally requires four phases (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 entire phase. A list denoting the consequences of failure of any particular course in the D.V.M. Program is as follows:
  - a. Failure in any of the following courses result in the **Repeat of the Course**: VETM\*3000, VETM\*3210, VETM\*3390, VETM\*3430, VETM\*3220, VETM\*3440, VETM\*3480, VETM\*3510, VETM\*4220, VETM\*4450, VETM\*4530, VETM\*4610, VETM\*4620, VETM\*4660, VETM\*4670, VETM\*4680, VETM\*4710, VETM\*4720, VETM\*4870, VETM\*4880, VETM\*4890, VETM\*4900, VETM\*4920, VETM\*4930, VETM\*4940.
  - 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\*4520.

This information is also available as part of the Phase Handbooks.

3. A student who is required to repeat a course and/or phase will be required to withdraw from the D.V.M. program. A student who is required to withdraw can register in the non-degree D.V.M. program. Non-degree D.V.M. Program status is normally granted for a maximum period of one year. Students must advise the Assistant Dean(s) of the College, in writing by 31 May, of their intention to register the following fall semester in the non-degree program to repeat the failed course and/or phase. Students must normally repeat a failed course and/or phase in the academic year immediately following that in which the failure occurred.
4. A student who successfully completes a repeated course and/or phase in the academic year immediately following that in which the failure occurred may re-apply to the D.V.M. program through Admission Services. Applications for readmission must be received by 31 May of the year in which they wish to be considered for readmission. Readmission is not automatic and will be conditional upon availability of space. Students considering readmission should consult the Assistant Dean(s) of the College regarding procedures and criteria for readmission to the D.V.M. program. A student who is readmitted to the D.V.M. program will be subject to the academic rules and regulations in effect for the readmission year.
5. A student will be allowed to fail a particular course only once. Any student who fails the same course twice will be ineligible for readmission to the D.V.M. Program.
6. Grades obtained by D.V.M. students who repeat one or more VETM course(s) while enrolled in the non-D.V.M. program, 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. The new D.V.M. program average will include the grades obtained in both the original and repeat 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 Assistant 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 8 semester Honours D.V.M. program, the student must have completed successfully the courses approved for the program. Students will not be allowed to graduate while on probation.

## 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 Assistant Dean for Student Affairs, 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.

## Protective Clothing

All D.V.M. students will require 3 laboratory coats and 3 pairs of coveralls. Students in Phase 3 must also have 3 surgical suits. Phase 4 students will require an additional 1 of each of the 3 types of protective clothing. Labels with each student's name must be affixed to all items of clothing. All soiled clothing must be laundered through the Veterinary Teaching Hospital's "dirty-in /clean-out" plan. Students must wear steel-capped shoes or boots in the large animal clinic and rubber boots in pathology laboratories. A pair of white shoes and a pair of obstetrical boots must be available in Phase 4. The Veterinary Teaching Hospital will not provide extra protective clothing; however, short white jackets will be provided by the Veterinary Teaching Hospital for Phase 4 students during the small animal medicine rotation.

## 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 Health Services 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.*

## Schedule 4 (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 impact either the PA or PHA Average because they are not attached to any numerical grade.

Students on Probation at the end of Phase 1 or 2 must clear this probationary status by achieving the required PA average by the end of Phase 2 or 3 respectively. If a student does not achieve the required standing by the end of the probationary period he or she will normally be required to withdraw from the program.

Students finishing Phase 3 on probationary status will not be permitted to proceed to the Externship or into Phase 4. 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 Continue. These may include repeating a component of a course, one or more entire courses, an entire Phase, or one or more clinical rotations. The required averages are as follows:

### For Course Attempts in Phase I

Program Average (PA)	Status of Student
PA < 50%	Required to Withdraw
PA ≥ 50% and PA <60%	Probationary Status
PA ≥ 60%	Eligible to Continue

### For Course Attempts in Phase 2 and Beyond

If Eligible to Continue:

Program Average (PA) and Phase Average (PHA)	Status of Student
PHA < 50%	Required to Withdraw
PA or PHA ≥ 50% but PA <60%	Probationary Status
PA and PHA ≥ 60%	Eligible to Continue

If on Probation:

Program Average (PA)	Status of Student
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PA < 60%	Required to Withdraw
PA ≥ 60%	Eligible to Continue

## Schedule of Studies

### Phase 1

VETM*3000	[0.50]	Veterinary Biochemistry
VETM*3070	[2.00]	Veterinary Anatomy
VETM*3080	[1.50]	Veterinary Physiology
VETM*3120	[0.75]	Veterinary Histology
VETM*3210	[0.50]	Art of Veterinary Medicine I
VETM*3390	[0.50]	Veterinary Medical Genetics
VETM*3400	[0.75]	Health Management I
VETM*3430	[0.25]	Clinical Medicine I

### Phase 2

VETM*3220	[0.50]	Art of Veterinary Medicine II
VETM*3410	[0.75]	Health Management II
VETM*3440	[0.50]	Clinical Medicine II
VETM*3450	[2.75]	Principles of Disease in Veterinary Medicine
VETM*3460	[0.75]	Theriogenology
VETM*3470	[0.75]	Anaesthesiology
VETM*3480	[0.50]	Phase 2: Special Topics
VETM*3510	[0.25]	Principles of Surgery

### Phase 3

VETM*4220	[0.50]	Art of Veterinary Medicine III
VETM*4450	[0.50]	Equine Medicine and Surgery
VETM*4460	[1.00]	Food Animal Medicine and Surgery
VETM*4470	[1.00]	Medicine and Surgery of Dog and Cat
VETM*4480	[0.75]	Comparative Medicine
VETM*4490	[1.00]	Systems Pathology
VETM*4520	[2.00]	Surgical Exercises
VETM*4530	[0.50]	Advanced Health Management Modules
VETM*4870	[0.25]	Clinical Medicine III

### Phase 4

Students entering into the Phase 4 of the DVM Program will select an area of emphasis from either: Small Animal Stream, Mixed Stream, Equine Stream or the Food Animal Stream.

#### Small Animal Stream:

VETM*4610	[3.25]	Small Animal Clinics - Small Animal Stream
VETM*4620	[1.00]	Health Management - Small Animal Stream
VETM*4880	[3.25]	Electives in Veterinary Medicine I
VETM*4900	[2.50]	Veterinary Externship

#### Mixed Stream:

VETM*4660	[2.00]	Small Animal Clinics - Mixed Stream
VETM*4670	[1.50]	Large Animal Clinics - Mixed Stream
VETM*4680	[2.00]	Health Management - Mixed Stream
VETM*4890	[2.00]	Electives in Veterinary Medicine II
VETM*4900	[2.50]	Veterinary Externship

#### Equine Stream:

VETM*4920	[1.50]	Small Animal Clinics - Equine Stream
VETM*4930	[2.50]	Large Animal Clinics - Equine Stream
VETM*4940	[1.50]	Health Management - Equine Stream
VETM*4890	[2.00]	Electives in Veterinary Medicine II
VETM*4900	[2.50]	Veterinary Externship

#### Food Animal Stream:

VETM*4710	[1.00]	Large Animal Clinics - Food Animal Stream
VETM*4720	[3.25]	Health Management - Food Animal Stream
VETM*4880	[3.25]	Electives in Veterinary Medicine I
VETM*4900	[2.50]	Veterinary Externship

## Co-operative Education Programs

Co-operative Education is an experiential learning process that integrates academic study with paid hands-on work experience. Guelph's co-op program is similar to a true job hunting process where you apply and compete for jobs that interest you rather than being placed in a job. Students are engaged in productive work in jobs developed and/or approved by Co-operative Education Services as suitable learning situations. You will submit a work report for each of your work terms and your employer will evaluate your performance.

All co-op students will complete 3 or 4 academic semesters before their first work term, giving them an academic foundation to build work experience upon. The academic and work schedules will vary with degree program and major. In addition, COOP\*1100 – Introduction to Co-operative Education, is a mandatory, non-credit course for all students enrolled in the co-op program and is a prerequisite for your first work term.

COOP\*1000 is designed to introduce you to the theory and practice of co-op at the University of Guelph. The course will help you to identify and market your strengths and transferable skills, enhance your resume and cover letter writing abilities, increase your comfort and skill during interviews, and help you fully understand the employment process.

### Admission Information

Students are admitted to a Co-operative Education program directly from high school in the Fall semester. Some programs may admit a small number of in-course students after first or second semester. Normally, students must apply before their third academic semester in order to be considered. The decision to admit an in-course student is dependant upon space in the program, the grades of the student, the approved Academic and Work Sequence, and any other information relevant to the program. The On-Campus Co-ordinator is responsible for facilitating all admission processes. Please refer to the schedule of dates in the Undergraduate Calendar for in-course application deadlines.

### Eligibility

High school students must have a minimum average of 75% to apply to the co-op program. Once accepted to the University of Guelph, you must maintain a 70% cumulative average in the first 2 semesters (full-time study) in order to remain in the co-op program. For transfer students, you must meet normal admission requirements, as well as complete one academic semester at Guelph in which you achieve a minimum 70% average prior to participating in the co-op process. As well, you must have your academic and work schedule approved. Applicants must be a Canadian citizen or permanent resident/landed immigrant. Applicants holding U.S. citizenship should contact Co-operative Education and Career Services.

### Continuation of Study

Students will be allowed to continue in the co-op program only 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 before their first employment process.

Co-op students must normally be registered as full-time. Co-op students are also required to meet other conditions, (e.g. satisfactory work term reports and work performance evaluations) 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. The complete policy can be viewed at [www.coop.uoguelph.ca](http://www.coop.uoguelph.ca).

### Release of Academic Information

By applying to the Co-op program, students grant permission to the Registrar's Office to release to Co-operative Education 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 Registrar's Office. Students also grant permission to Co-operative Education Services to release their resumes, cover letters and any transcripts released by the Registrar's Office to prospective employers to whom the students are applying. Employment information, the work performance evaluation, and the work term report evaluation will appear on the academic transcripts.

### Procedures for Work Semester Reports

A Work Report is required for each co-op Work Term in which the student is registered. Work Reports are graded by the Co-op Faculty Advisor and must be submitted to the Co-op Faculty Advisor according to the deadline indicated in the Undergraduate Calendar. Students completing two consecutive Work Terms with the same employer should consult with their Co-op Faculty Advisor regarding Work Report requirements for eight-month Work Terms. A grade of Outstanding, Very Good, Good, Satisfactory, or Unsatisfactory will appear on the student's Academic Record.

A student who receives an Unsatisfactory Work Report Evaluation will be given an opportunity to make revisions and resubmit the report. Students who are resubmitting a Work Report will not be eligible to proceed to the next employment process until receiving a grade of Satisfactory or higher. If, upon resubmission, the Work Report Evaluation is still unsatisfactory, the student will be required to withdraw from Co-op and may continue in the regular program if available.

In the case of a confidential Work Report, the student is responsible for ensuring that a confidential report is acceptable to the Co-op Faculty Advisor and making evaluation arrangements with the co-op Faculty Advisor and the employer.

### Conditions for Graduation

In order to graduate, co-op students must follow the conditions for graduation for their degree program as outlined in the Undergraduate Calendar. In addition, students must receive evaluations of Good or higher in all but one Work Performance Evaluations and an evaluation 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. The Canadian Association for Co-operative Education (CAFCE) guidelines regarding Work Terms will be followed at all times.

### Co-op Fees

Students in Co-op are required to pay a co-op fee each semester (see Section VI--Schedule of Fees). Students who enter Co-op in-course will have an altered payment schedule to be discussed upon admission. There is no application fee.

### Schedule of Studies

Students entering the Co-op program are advised to review carefully the academic semester/work semester sequence as set out in the schedule of studies for the degree programs and specialization offered under Co-operative Education. Normally students must follow the sequence as scheduled. If, under exceptional circumstances, the schedule cannot be followed, the student must obtain written approval of an alternative work and academic semester sequence from the Co-op Coordinator and Co-op Faculty Advisor. In unusual circumstances the Director of Co-operative Education and Career Services may be involved in the approval process.

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**University of Guelph-Humber**

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For University of Guelph-Humber programs please refer to <http://www.guelphhumber.ca>.

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## **Associate Diploma Programs**

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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/](http://www.uoguelph.ca/diploma_calendar/).

# XI. Special Study Opportunities

## Certificates and Diplomas

The University offers certificate and diploma programs in Applied Statistics, Environmental Citizenship, Environmental Conservation, Food Science, Hospitality Studies, Leadership, and Public Policy and Administration. These programs are designed 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 over a period of time.

Individuals who are not currently registered in a degree program should apply through the Office of Open Learning. Please consult with the Program Counsellor for Open Learning (ext. 56050). Individuals who are currently enrolled in a degree program should apply through the Admissions Office at the University of Guelph. Please consult with the Admissions Counsellor (ext. 56060).

For those who are in a degree program or who will be transferring into a degree program, there will be a restriction as to the number of courses which can be used for both a certificate/diploma and a degree specialization. Up to 50% of the requirements for a degree-credit certificate can be applied towards a degree. Note that the Certificate in Leadership is exempt from this restriction.

### 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 Faculty of Environmental Sciences. It is structured as follows, requiring six courses total, to include at least one at the 3000 or 4000 level:

#### Required Course

UNIV*2050*DE	[0.50]	Environmental Perspectives and Human Choices I
<b>2 or 3 of the following:</b>		
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
EDRD*4500*DE	[0.50]	Planning Industrial Ecology
GEOG*1220*DE	[0.50]	Human Impact on the Environment
HIST*2250*DE	[0.50]	Environment and History
PHIL*2070*DE	[0.50]	Philosophy of the Environment
POLS*3370*DE	[0.50]	Environmental Policy Formation and Administration
SOIL*2120*DE	[0.50]	Introduction to Environmental Stewardship
UNIV*3250*DE	[0.50]	Environmental Perspectives and Human Choices II

#### 2 or 3 of the following:

BIOL*2060*DE	[0.50]	Ecology
BOT*1200*DE	[0.50]	Plants and Human Use
EDRD*3450*DE	[0.50]	Watershed Planning Practice
ENVB*3000*DE	[0.50]	Nature Interpretation
GEOG*2210*DE	[0.50]	Environment and Resources
GEOG*3210*DE	[0.50]	Management of the Biophysical Environment
MET*1000*DE	[0.50]	The Atmospheric Environment
ZOO*1500*DE	[0.50]	Humans in the Natural World - a Zoological Perspective
ZOO*2050*DE	[0.50]	Natural History of Ontario

For more information, please visit the website at: <http://www.environmentalcertificates.com>.

### 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 Faculty 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

SOIL*2120*DE	[0.50]	Introduction to Environmental Stewardship
<b>2 or 3 of the following:</b>		
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
GEOL*1100*DE	[0.50]	Principles of Geology
MET*1000*DE	[0.50]	The Atmospheric Environment
SOIL*2010*DE	[0.50]	Soil Science
SOIL*3080*DE	[0.50]	Soil and Water Conservation
<b>2 or 3 of the following:</b>		
BIOL*2060*DE	[0.50]	Ecology

BIOL*3450*DE	[0.50]	Introduction to Aquatic Environments
ENVB*3000*DE	[0.50]	Nature Interpretation
ENVB*3040*DE	[0.50]	Natural Chemicals in the Environment
GEOG*2210*DE	[0.50]	Environment and Resources
GEOG*3210*DE	[0.50]	Management of the Biophysical Environment
ZOO*2050*DE	[0.50]	Natural History of Ontario

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 in a distance education mode. Normally, learners will require two years to complete the process. The certificate program is aimed at upgrading individuals who either have a formal university education in an area other than Food Science or have been working in Food Science-related areas but who have no academic background in Food Science. The certificate program concentrates on the chemistry, analysis, microbiology and processing of foods, and on the maintenance of food safety and quality throughout. All courses are offered in an interactive format via the internet.

Individuals interested in entering the Certificate in Food Science program should enrol in the Open Learning program through the Office of Open Learning. Post-secondary courses in microbiology and chemistry are pre-requisites for entrance into the program.

The core 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	[0.50]	Principles of Food Science
FOOD*2400*DE	[0.50]	Introduction to Food Chemistry
FOOD*2410*DE	[0.50]	Introduction to Food Processing
FOOD*2420*DE	[0.50]	Introduction to Food Microbiology
FOOD*3430*DE	[0.50]	Introduction to Food Analysis

For more information, please visit the website at: <http://www.foodsciencecertificate.com>.

### Certificate in Hospitality Studies

The Certificate in Hospitality Studies is offered online from the University of Guelph's School of Hospitality and Tourism Management. 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.

Prior Learning Assessment is in place for this Certificate to evaluate and recognize experience and previous education, including seminars, workshops and corporate training programs. Students may receive credit to a maximum of one credit towards one of the required courses. See Chapter VIII, Prior Learning Assessment, for more information. Individuals interested in PLA should consult with the Program Counsellor at the Office of Open Learning (ext. 56050).

The Certificate requires the five courses listed below:

#### Required Courses

HTM*2030*DE	[0.50]	Control Systems in the Hospitality and Tourism Industry
HTM*2150*DE	[0.50]	Introduction to Canadian Business Management
HTM*2200*DE	[0.50]	Organizational Behaviour I
HTM*3000*DE	[0.50]	Human Resources Management
HTM*3070*DE	[0.50]	Hospitality and Tourism Management Accounting

Note: Required courses must be taken in order.

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 Faculty of Management, College of Social and Applied Human Sciences. This certificate program allows undergraduate students to complete concurrently both their degree program and the certificate. 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 organizational settings. Five undergraduate courses 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.

The program consists of 2.50 credits chosen from the lists below, plus 120 hours of leadership practice, in an approved placement. Some courses require particular prerequisites; it is important to take into account the necessary prerequisites and semester offered when determining the sequence in which courses are taken. Students should consult with the Open Learning Program Counsellor at the Office of Open Learning (ext. 56050). Students who wish to enrol in the Certificate in Leadership program should contact the Office of Open Learning at 519-767-5000. For more information, please visit the website at: <http://www.leadershipcertificate.com>.

#### 1.00 credits from:

UNIV*2000	[0.50]	Foundations of Leadership
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[students must contact the Office of Open Learning for instructor consent]

UNIV\*4000 [0.50] Leadership Capstone  
[students must contact the Office of Open Learning for instructor consent]

**0.50 credits from:**

PHIL\*2120 [0.50] Ethics  
PHIL\*2600 [0.50] Business and Professional Ethics  
POLS\*3440 [0.50] Corruption, Scandal and Political Ethics

**1.00 credits from:**

ENVS\*2010 [0.50] Decision-making and Communication Skills  
[restricted to B.Sc.Env. students only]  
HTM\*2150 [0.50] Introduction to Canadian Business Management  
[Note: B.Comm students may not take this course for credit in their degree program.]  
HTM\*3000 [0.50] Human Resources Management  
ISS\*2500 [0.50] Management in Organizations  
PHIL\*2100 [0.50] Critical Thinking  
POLS\*2250 [0.50] Public Administration  
POLS\*3940 [0.50] Accountability and Canadian Government  
PSYC\*3070 [0.50] Psychology in Human Resource Management  
PSYC\*3080 [0.50] Organizational Psychology  
REXT\*3040 [0.50] Communication Process  
REXT\*3060 [0.50] International Communication  
REXT\*4100 [0.50] Leadership Development in Rural Organization  
SOAN\*2040 [0.50] Globalization of Work and Organizations

**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\*2080 [0.50] Elements of Calculus II  
MATH\*2150\*DE [0.50] Applied Matrix Algebra  
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\*3210 [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\*4080 [0.50] Data Analysis  
STAT\*4350 [0.50] Applied Multivariate Statistical Methods  
STAT\*4360 [0.50] Applied Time Series Analysis  
STAT\*4510 [0.50] Advanced Risk Analysis

**Diploma in Public Policy and Administration**

The program is designed for those who wish to develop their skills in public sector management and public policy analysis. The requirement of 5.00 credits for the diploma is divided into 2 groups of courses: required courses and elective courses.

Students are encouraged to consult the Diploma in Public Policy and Administration program coordinator or Chair of the Department of Political Science with regard to the availability and on-going development of distance education courses.

**Required Courses**

POLS\*1400\*DE [0.50] Issues in Canadian Politics  
POLS\*2250\*DE [0.50] Public Administration  
POLS\*3250 [0.50] Public Policy: Challenges and Prospects  
POLS\*3440\*DE [0.50] Corruption, Scandal and Political Ethics  
POLS\*4250 [0.50] Problems in Public Administration and Public Policy

**Electives - at least 2.50 credits must be chosen from the following:**

POLS\*2300\*DE [0.50] Canadian Government  
POLS\*3110 [0.50] Politics of Ontario  
POLS\*3210 [0.50] The Constitution and Canadian Federalism  
POLS\*3270 [0.50] Local Government in Ontario  
POLS\*3280 [0.50] Modern Political Ideologies  
POLS\*3330 [0.50] Politics and Trade Liberalization in the Americas  
POLS\*3370\*DE [0.50] Environmental Policy Formation and Administration  
POLS\*3470 [0.50] Business-Government Relations in Canada  
POLS\*3670 [0.50] Comparative Public Policy and Administration

**Co-operative Education**

Co-operative Education options are offered in 28 majors. Co-op provides eligible students with the opportunity to alternate semesters of academic study with semesters of paid work experience. The work experience is related to the student's academic program and/or career objectives. Admission can occur directly into semester 1 or in-course (but not beyond Academic Semester 3).

For further details refer to information on Co-operative Education in Section X--Degree Programs. Course requirements and work study sequences for specific majors are listed under the appropriate degree program in Section X--Degree Programs.

**Distance Education**

The Distance Education program, administered by the Office of Open Learning, supports academic departments in offering degree credit courses to students who choose to study outside the traditional classroom environment. Courses may come with a variety of learning resources, including: manuals, videotapes, audiotapes, audio CDs, DVDs, CD-ROMs, etc., depending on the nature of the course. As well, most courses incorporate computer conferencing, email, computer-based quizzes, and the use of the Internet. Distance education provides a contemporary means through which the University of Guelph continues its tradition of outreach and open learning opportunities.

Students may take distance education courses for a variety of reasons, including: to have flexibility in designing their own study schedules; to avoid timetable conflicts; to acquire credits while away on summer break or on a co-op job placement; to take courses unavailable in class in a given semester; to learn in an interactive online environment.

The University of Guelph recognizes the importance of distance learning and is committed to providing opportunities for the off-campus learner. A wide range of subject areas and course levels is available.

The following is a list of the courses that are offered in the distance format. **When selecting these courses, section DE must be specified to indicate the distance education offering.** Please consult Section XII--Course Descriptions. Because additional courses are constantly being developed, please consult the Office of Open Learning, Room 160, Johnston Hall, 767-5000, email: info@open.uoguelph.ca for an updated listing of courses available by distance education and when they are scheduled to be offered. Course listings are also available at [www.open.uoguelph.ca](http://www.open.uoguelph.ca).

AGEC*2220*DE	[0.50]	Financial Accounting
AGEC*2230*DE	[0.50]	Management Accounting
AGEC*2300*DE	[0.50]	Organic Marketing
ANTH*1150*DE	[0.50]	Introduction to Anthropology
BIOL*2060*DE	[0.50]	Ecology
BIOL*2210*DE	[0.50]	Introductory Cell Biology
BIOL*3450*DE	[0.50]	Introduction to Aquatic Environments
BIOM*2000*DE	[0.50]	Concepts of Physiology
BOT*1200*DE	[0.50]	Plants and Human Use
BOT*2000*DE	[0.50]	Plants, Biology and People
CHEM*1060*DE	[0.50]	Introductory Chemistry
CIS*1000*DE	[0.50]	Introduction to Computer Applications
CIS*1200*DE	[0.50]	Introduction to Computing
CIS*1500*DE	[0.50]	Introduction to Programming
CIS*1900*DE	[0.50]	Discrete Structures in Computer Science
CIS*2100*DE	[0.50]	Scientific Computing and Applications Development
ECON*1050*DE	[0.50]	Introductory Microeconomics
ECON*1100*DE	[0.50]	Introductory Macroeconomics
ECON*2100*DE	[0.50]	Economic Growth and Environmental Quality
ECON*2310*DE	[0.50]	Intermediate Microeconomics
ECON*2410*DE	[0.50]	Intermediate Macroeconomics
ECON*3560*DE	[0.50]	Theory of Finance
ECON*3660*DE	[0.50]	Economics of Equity Markets
ECON*4400*DE	[0.50]	Economics of Organizations and Corporate Governance
EDRD*3450*DE	[0.50]	Watershed Planning Practice
EDRD*3500*DE	[0.50]	Recreation and Tourism Planning
EDRD*3550*DE	[0.50]	Economic Development for Rural and Smaller Communities
EDRD*4010*DE	[0.50]	Tourism Planning in the Less Developed World
EDRD*4500*DE	[0.50]	Planning Industrial Ecology
ENGL*1200*DE	[0.50]	Reading the Contemporary World
ENGL*1410*DE	[0.50]	Major English Writers
ENGL*2640*DE	[0.50]	Culture, Location, Identity: Minoritized Literatures in Canada and Beyond
ENVB*2210*DE	[0.50]	Introductory Apiculture
ENVB*3000*DE	[0.50]	Nature Interpretation
ENVB*3040*DE	[0.50]	Natural Chemicals in the Environment
ENVB*4780*DE	[0.50]	Forest Ecology
EURO*1050*DE	[0.50]	The Emergence of a United Europe
EURO*2070*DE	[0.50]	European Integration, 1957-1992
FOOD*2010*DE	[0.50]	Principles of Food Science
FOOD*2400*DE	[0.50]	Introduction to Food Chemistry

FOOD*2410*DE	[0.50]	Introduction to Food Processing	POLS*2300*DE	[0.50]	Canadian Government
FOOD*2420*DE	[0.50]	Introduction to Food Microbiology	POLS*3370*DE	[0.50]	Environmental Policy Formation and Administration
FOOD*3430*DE	[0.50]	Introduction to Food Analysis	POLS*3440*DE	[0.50]	Corruption, Scandal and Political Ethics
FOOD*4010*DE	[0.50]	Food Plant Sanitation and Quality Control	POLS*3940*DE	[0.50]	Accountability and Canadian Government
FOOD*4070*DE	[0.50]	Food Packaging	PSYC*1100*DE	[0.50]	Principles of Behaviour
FREN*1090*DE	[0.50]	Basic French: Reading	PSYC*1200*DE	[0.50]	Dynamics of Behaviour
FREN*1100*DE	[0.50]	Basic French: Listening	PSYC*2010*DE	[0.50]	Quantification in Psychology
FREN*1120*DE	[0.50]	Basic French: Writing	PSYC*2310*DE	[0.50]	Introduction to Social Psychology
FREN*2500*DE	[0.50]	French Translation I	PSYC*2360*DE	[0.50]	Introductory Research Methods
FRHD*1010*DE	[0.50]	Human Development	PSYC*2390*DE	[0.50]	Principles of Sensation and Perception
FRHD*1020*DE	[0.50]	Couple and Family Relationships	PSYC*2450*DE	[0.50]	Introduction to Developmental Psychology
FRHD*2060*DE	[0.50]	Adult Development and Aging	PSYC*2650*DE	[0.50]	Cognitive Psychology
FRHD*2100*DE	[0.50]	Development of Human Sexuality	PSYC*2740*DE	[0.50]	Personality
FRHD*2110*DE	[0.50]	Exceptional Children and Youth	PSYC*3010*DE	[0.50]	Compensation Systems
FRHD*2260*DE	[0.50]	Infant Development	PSYC*3020*DE	[0.50]	Psychology of Law
FRHD*2270*DE	[0.50]	Development in Early and Middle Childhood	PSYC*3060*DE	[0.50]	Occupational Health Psychology
FRHD*2280*DE	[0.50]	Adolescent Development	PSYC*3070*DE	[0.50]	Psychology in Human Resource Management
FRHD*3190*DE	[0.50]	Administration of Programs for Children and Youth	PSYC*3080*DE	[0.50]	Organizational Psychology
GEOG*1200*DE	[0.50]	Society and Space	PSYC*3090*DE	[0.50]	Training and Development
GEOG*1220*DE	[0.50]	Human Impact on the Environment	PSYC*3220*DE	[0.50]	Ergonomics: the Scientific Study of People-System Relationships
GEOG*1300*DE	[0.50]	Introduction to the Biophysical Environment			
GEOG*2210*DE	[0.50]	Environment and Resources	PSYC*3250*DE	[0.50]	Psychological Measurement
GEOG*3020*DE	[0.50]	Global Environmental Change	PSYC*3340*DE	[0.50]	Psycholinguistics
GEOG*3210*DE	[0.50]	Management of the Biophysical Environment	PSYC*3390*DE	[0.50]	Abnormal Psychology
GEOG*3490*DE	[0.50]	Tourism and Environment	PSYC*3480*DE	[0.50]	Psychology of Sport
GEOL*1100*DE	[0.50]	Principles of Geology	PSYC*3570*DE	[0.50]	The Psychology of Death and Dying
GEOL*2250*DE	[0.50]	Geology of Natural Disasters	PSYC*3710*DE	[0.50]	Psychology of Learning Difficulties and Disabilities I
HIST*1150*DE	[0.50]	20th-Century Global History	PSYC*3800*DE	[0.50]	Psychology and Education
HIST*2000*DE	[0.50]	The British Isles, 1066-1603	PSYC*3850*DE	[0.50]	Intellectual Disabilities
HIST*2040*DE	[0.50]	War and Society	REXT*3040*DE	[0.50]	Communication Process
HIST*2070*DE	[0.50]	World Religions in Historical Perspective	REXT*3060*DE	[0.50]	International Communication
HIST*2250*DE	[0.50]	Environment and History	REXT*3080*DE	[0.50]	Technology in Extension
HIST*2450*DE	[0.50]	The Practicing Historian	SOAN*2400*DE	[0.50]	Introduction to Gender Systems
HIST*2610*DE	[0.50]	Contemporary Canadian Issues	SOC*1100*DE	[0.50]	Sociology
HIST*2830*DE	[0.50]	The Emergence of Modern Germany 1871-1990	SOC*1500*DE	[0.50]	Crime and Criminal Justice
HIST*3020*DE	[0.50]	Sexuality and Gender in History	SOC*2070*DE	[0.50]	Social Deviance
HIST*3030*DE	[0.50]	Celtic Britain and Ireland to 1066	SOC*2750*DE	[0.50]	Serial Murder
HIST*3140*DE	[0.50]	Witch-hunts and Popular Culture	SOC*3490*DE	[0.50]	Law and Society
HIST*3530*DE	[0.50]	Celtic Britain and Ireland Since 1603	SOIL*2010*DE	[0.50]	Soil Science
HIST*3540*DE	[0.50]	World War Two	SOIL*2120*DE	[0.50]	Introduction to Environmental Stewardship
HIST*4050*DE	[0.50]	Topics in Scottish History	SOIL*3080*DE	[0.50]	Soil and Water Conservation
HORT*1060*DE	[0.50]	Plant Identification: Woody Plants	SOIL*3300*DE	[0.50]	Land Resource Stewardship
HORT*3430*DE	[0.50]	Wine-Grape Culture	SPAN*1100*DE	[0.50]	Introductory Spanish
HTM*2030*DE	[0.50]	Control Systems in the Hospitality and Tourism Industry	SPAN*1110*DE	[0.50]	Intermediate Spanish
HTM*2150*DE	[0.50]	Introduction to Canadian Business Management	STAT*2060*DE	[0.50]	Statistics for Business Decisions
HTM*2200*DE	[0.50]	Organizational Behaviour I	THST*2500*DE	[0.50]	Contemporary Cinema
HTM*3000*DE	[0.50]	Human Resources Management	UNIV*2050*DE	[0.50]	Environmental Perspectives and Human Choices I
HTM*3070*DE	[0.50]	Hospitality and Tourism Management Accounting	UNIV*3250*DE	[0.50]	Environmental Perspectives and Human Choices II
HTM*3180*DE	[0.50]	Casino Operations Management	WMST*1000*DE	[0.50]	Introduction to Women's Studies
HTM*4160*DE	[0.50]	Human Resources Planning	ZOO*1500*DE	[0.50]	Humans in the Natural World - a Zoological Perspective
LARC*1950*DE	[0.50]	History of Cultural Form I	ZOO*2050*DE	[0.50]	Natural History of Ontario
LARC*4610*DE	[0.50]	Professional Practice			
MATH*1000*DE	[0.50]	Introductory Calculus	<b>Note:</b>		
MATH*2150*DE	[0.50]	Applied Matrix Algebra	• Getting ready for Calculus, a non-degree credit preparatory course, is also offered via distance.		
MBG*3060*DE	[0.50]	Quantitative Genetics	<b>Note:</b> Please check with the Office of Open Learning regarding the technology and resource requirements (e.g. computer, internet, VCR, DVD player, etc.) for the specific course(s) in which you are interested.		
MBG*3090*DE	[0.50]	Applied Animal Breeding	The courses have been designed and written by experts to meet rigorous standards. Clusters of courses are offered from selected areas of specialization within the University.		
MBG*3600*DE	[0.25]	Introduction to Genomics	The Diploma in Public Policy and Administration, the Certificate in Food Science, the Certificate in Hospitality Studies, the Certificate in Environmental Citizenship, the Certificate in Environmental Conservation and the Certificate in Leadership are also offered in the distance education mode in whole or in part (see Certificates and Diplomas in this section for further information).		
MCS*1000*DE	[0.50]	Introductory Marketing			
MCS*2020*DE	[0.50]	Information Management			
MCS*2100*DE	[0.50]	Personal Financial Management			
MCS*3010*DE	[0.50]	Quality Management			
MCS*3030*DE	[0.50]	Research Methods			
MET*1000*DE	[0.50]	The Atmospheric Environment			
MUSC*1060*DE	[0.50]	Introduction to Music			
MUSC*1130*DE	[0.50]	Introduction to Musicianship			
MUSC*2140*DE	[0.50]	History of Jazz			
MUSC*2280*DE	[0.50]	Masterworks of Music			
NUTR*1010*DE	[0.50]	Nutrition and Society			
NUTR*2050*DE	[0.50]	Family and Community Nutrition			
PATH*3610*DE	[0.50]	Principles of Disease			
PHIL*2070*DE	[0.50]	Philosophy of the Environment			
PHIL*2100*DE	[0.50]	Critical Thinking			
PHYS*1020*DE	[0.50]	Introductory Physics			
PHYS*1600*DE	[0.50]	Contemporary Astronomy			
POLS*1400*DE	[0.50]	Issues in Canadian Politics			
POLS*1500*DE	[0.50]	World Politics			
POLS*2250*DE	[0.50]	Public Administration			

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 are 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 are 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 advised to refer to Section VI--Schedule of Fees.

### Undergraduate Regulations

Students are referred to Section 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 these options, beginning no later than their third undergraduate year. Decisions regarding the desired area of study and pursuit of scholarship support require forethought and planning. Information, application forms, and counselling are available through the graduate coordinators of each department/school. Students are also welcome to visit the Office of Graduate Program Services, Level 3, University Centre.

The University of Guelph offers opportunities for qualified students to do graduate work leading to the Master of Arts (M.A.), Master of Science (M.Sc.), Master of Landscape Architecture (M.L.A.), Master of Engineering (M.Eng.), Master of Science in Aquaculture (M.Sc. Aqua), Master of Business Administration (M.B.A.), Master of Fine Art (M.F.A.), Master of Science in Planning (M.Sc. Plan), Master of Applied Nutrition (M.A.N.), Doctor of Philosophy (Ph.D.), and Doctor of Veterinary Science (D.V.Sc.) degrees.

### Interdisciplinary Studies

The University of Guelph offers many interdisciplinary programs that cross departmental and college boundaries. In addition, specific courses and specializations have been modelled on an interdisciplinary approach to the topic or subject area.

Courses with an interdisciplinary approach and content are listed in Section XII under the following headings: Humanities, Physical Science, and Social Science as well as Interdisciplinary University Courses.

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 Section IX.

### Bachelor of Arts

Criminal Justice and Public Policy  
Environmental Studies (Minor)  
European Studies  
Information Systems & Human Behaviour  
International Development  
Women's Studies

### 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 (Biological Science)

Biomedical Toxicology  
Earth Surface Science  
Environmental Toxicology  
Plant Biology

### Bachelor of Science in Environmental Sciences

### Open Learning

The University of Guelph serves the learning needs of people of all ages 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.

### The Office of Open Learning

The Office of Open Learning is the institutional focus for distance education, continuing education, and the Open Learning program. As such, the Office of Open Learning supports departments in the development and delivery of open learning activities. Courses and programs cover a broad spectrum of learning needs which include professional updating programs and general interest/knowledge enhancing courses.

### The Open Learning program

The Open Learning program is an open admission distance-only part-time mode of study that provides access to degree-credit university courses for individuals who wish to study independently but are not interested in pursuing a degree at the University of Guelph at the present time. You may register in the Open Learning program, even if you are in another program or are registered at another post-secondary educational institution. The Open Learning program extends the academic resources of the University to those interested in personal enrichment, professional updating, or eventual application to a degree program.

Open Learning program students must complete the same assignments and examinations as those in degree programs and are evaluated using the same standards. Upon successful completion of a course, learners receive the same credit weight for courses as would apply to courses taken within the degree program.

### Continuing Education Option

Those not interested in receiving degree credit for courses may register as continuing education students. Learners taking courses in this way are not required to complete assignments or related exams.

Further information is available from the Office of Open Learning, Room 160 Johnston Hall, by email: [info@open.uoguelph.ca](mailto:info@open.uoguelph.ca), by phone (519) 767-5000 or at [www.open.uoguelph.ca](http://www.open.uoguelph.ca).

### Guaranteed Admission to a B.A. 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 the B.A. 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.

### Open Learning program Certificates and Diplomas

Certificate in Environmental Citizenship  
Certificate in Environmental Conservation  
Certificate in Food Science  
Certificate in Hospitality Studies  
Certificate in Leadership  
Diploma in Public Policy and Administration  
(Refer to Certificates & Diplomas in this section for descriptions or contact the Office of Open Learning.)

### Open Learning program Courses\*

*\*please check with the Office of Open Learning regarding the technology and resource requirements (e.g. computer, internet, VCR, DVD, etc.) for the specific course(s) in which you are interested.*

Please refer to Distance Education in this section for a listing of courses offered through the Open Learning program.

## Open Learning Scholarships/Bursaries

### Open Learning Bursaries

The Office of Open Learning (OOL) staff and friends have established and contribute annually to a bursary fund, which initially will provide two \$250 awards. These funds are intended to provide support for non-degree students, in need of financial assistance, who are wishing to enroll in an Office of Open Learning continuing education activity and/or in the Open Learning program (courses, certificates and diplomas). Apply to the Office of Open Learning by January 30th and July 30th for the following Fall and/or Winter and/or Summer semesters of study with a letter of application outlining financial need with pertinent supporting documentation. Applications must be submitted to: OOL Bursary Award Committee, Office of Open Learning, University of Guelph, Johnston Hall Room 160, Guelph, Ontario, N1G 2W1.

**Qualification(s):** Canadian citizens or permanent residents with the greatest financial need.

**Amount:** Two awards of \$250.

### The Malik Scholarship

Awarded in honor of retired faculty member Professor Henrick Malik, of the Department of Mathematics and Statistics in the College of Physical and Engineering Science.

**Qualification(s):** A student in the Open Learning program who achieves at least 80% and the highest final grade in a given year in the distance education course Statistics for Business Decisions (STAT\*2060\*DE)

**Amount:** One award of \$150

## Distance Education

The Office of Open Learning facilitates the delivery of degree credit courses to students who are typically off-campus or wish to take distance courses in order to accommodate their schedules. The Office of Open Learning 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.

Calendars and brochures outlining complete details of activities are available from the Office of Open Learning, Johnston Hall Room 160, 767-5000, info@open.uoguelph.ca, or at www.open.uoguelph.ca.

## Continuing Education

The Office of Open Learning 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 the Office of Open Learning contact us at tel: (519) 767-5000; fax (519) 767-1114; email: info@open.uoguelph.ca; website: www.open.uoguelph.ca; or visit us in Johnston Hall Room 160.

## Certificate Program In Couple & Family Therapy Studies

*(co-sponsored by the Ontario Association for Marriage and Family Therapy)*

The Certificate in Couple and Family Therapy Studies is designed to provide practising therapists with specialized training and updating in the needs, problems and changing patterns of couple and family relationships. Systems theory is the primary, although not the only, theoretical orientation within the program. Attention to issues of gender, race, class, ethnicity and culture underlies all aspects of the program. Program faculty are clinical members of the American Association for Marriage and Family Therapy (AAMFT) and AAMFT-approved supervisors.

Courses in this program are designed to meet the education requirements for Clinical Membership in the American Association for Marriage and Family Therapy. All courses are delivered at a level of rigour equivalent to that of a Master's degree and require completion of a formal evaluation component, marked according to University of Guelph grading standards. Individuals successfully completing the required course of study will receive the Certificate in Couple and Family Therapy Studies from the University of Guelph and the Ontario Association for Marriage and Family Therapy. While completion of all six courses in the certificate program is encouraged, students are welcome to take courses for general interest or specific upgrading, provided they have adequate background and/or preparation. It is strongly recommended that students pursue a concurrent program of clinical practice and supervision. Prerequisite: A bachelor's degree.

### Required Courses

Theories and Methods of Family Therapy I

Theories and Methods II: Post-Modern Models in Family Therapy

Theories and Methods of Couple Therapy

### Elective Courses (Choose 3)

Violence in Families

Human Sexuality and Sex Therapy

Divorce, Single Parenting and Re-marriage

Change Strategies in Therapy

Research in Marriage and Family Therapy

Professional Ethics in Marriage and Family Therapy

Family Therapy and Mental Health

Spirituality: A New Story in Family Therapy

Couple and Family Therapy with LGBT Clients and their Families

## Diploma in Human Resources Management

Human resources management is a system of interrelated activities including training and development, compensation management, and labour relations that work towards satisfying organizational goals and objectives. Typically, managers in smaller organizations are responsible for these activities in addition to other operational responsibilities. In larger organizations, the human resources department generally has subject specialists who oversee each function area. Regardless of how the system of activities is administered, individuals responsible for managing a group of employees should have a practical understanding of management tools and techniques to effectively work with the most important resource in their organizations - their people.

The Diploma in Human Resources Management program provides essential management foundation skills and knowledge with particular emphasis on relating practitioner principles, policies and procedures to "real world" situations. Courses in the Diploma meet the HRP AO academic program requirements. This program consists of ten courses and is designed to meet the learning needs of individuals who currently work in a human resources environment or who have ambition to do so.

### Required Courses

Human Resources Administration

Organization and Management

Finance and Accounting Concepts

Occupational Health and Safety

Salary Administration and Benefits

Training and Development

Labour-Management Relations

Human Resource Planning

Recruitment and Selection

### One of the following two courses by distance education:

PSYC\*3070\*DE [0.50] Psychology in Human Resource Management

PSYC\*3080\*DE [0.50] Organizational Psychology

## English Language Certificate Program

The English Language Certificate Program is an intensive academic English program designed to prepare ESL students aged 18 and over for academic study at the undergraduate and graduate level. Daily classes in grammar, reading, writing, listening and speaking help students achieve the advanced level English skill needed to be successful in academic studies. A student who successfully completes the Advanced level with an average of 75% earns the University of Guelph Certificate of English Proficiency. Applicants must have a minimum of intermediate level English skill, and have an academic goal to study at a university.

## Academic Writing at the Graduate Level

This online course introduces future and current graduate students to the writing requirements of graduate study in a Western university. Students study and analyze different types (genres) of writing from the three disciplinary areas of arts, the physical and natural sciences, and the social sciences in order to better understand these texts' function, audience and organization. These texts include abstracts, research proposals and thesis chapters. Through a small selection of readings, students are also introduced to the cultural dimension of graduate study at a Western university.

## Graduate Preparation Program

This intensive academic preparation program for graduate level students is designed to provide a bridge to academic and cultural life in a Western university. Classes in this two semester program include: Academic Writing Skills, Research Skills, Oral Presentation Skills, Lecture Note-taking Skills, Critical Thinking Skills, Academic Culture and Environment, Teaching Skills for Graduate Assistants, Understanding Canadian Culture and Conversation Practice.

## Academic Writing for Teachers of English as a Foreign Language (EFL), Level 1

This online course is designed to develop and improve the writing skills of English teachers who are not native English speakers, and who are teaching English writing to students planning to study in a Western university. This course takes a functional approach to developing EFL teachers' academic writing skills through the analysis of a number of short texts to learn about different types of academic texts and their purposes. Students develop the language used to describe, reason, analyze and evaluate in a supportive, interactive multimedia environment. The course includes a cultural component as students are introduced to the teaching and learning practices and general expectations of a Western university.

## International Student Certificate Program

This one year study abroad program is designed for international university students who do not qualify for traditional university exchange programs. The three semester program can be configured in one of three combinations of English Language Certificate Program

and Open Learning program. Participants must be an undergraduate university student in their home country and should have a letter of permission to study at the University of Guelph.

### Equine Science Certificate

The Certificate consists of six distance education courses taken online. This program is designed to provide horse owners and those working in the equine industry with evidence based knowledge to improve the health and performance of horses in their care.

#### The courses are as follows:

Management of the Equine Environment  
Equine Exercise Physiology  
Equine Health and Disease Prevention  
Equine Functional Anatomy  
Growth and Development  
Equine Nutrition

For details and to apply, please see <http://www.equinesciencertificate.ca>

### Landscape/Horticulture Online Certificate Programs

The Landscape/Horticulture Online Certificate Programs include five certificates and over 25 online/web-based courses offered by distance education. Learners may enrol in one or more individual courses or study towards one or more of the certificates.

#### Creating Landscapes Certificate

The Creating Landscapes Certificate is designed to provide landscape designers, contractors and gardening enthusiasts with the training and skills necessary for creating desirable outdoor living environments. The program refers to historical influences on modern landscape design and discusses the Design Process. Other topics include management principles for operating a successful business, the physical properties and uses of landscape construction material, and incorporating computer technology in creating successful designs.

#### Required Courses:

Landscape Design I  
Landscape Design II  
Introduction to Landscape Construction  
Landscape Plants or Introduction to Plant Identification  
Computer Assisted Design  
Business Management Principles

For details and to apply, please see <http://www.horticulturecertificates.com/>.

#### Maintaining Golf Courses Certificate

The Maintaining Golf Courses Certificate is designed to provide turf managers and golf superintendents with turf identification and management skills, insight into golf course design and construction techniques, tree care techniques and other best management practices related to the care of golf courses. Challenges such as maintaining healthy playing conditions while respecting environmental needs such as wildlife and water quality are also examined.

#### Required Courses:

Turf Management  
Irrigation  
Golf Course Design and Construction  
Weed Management in Turf  
Arboriculture  
Environmental Management of the Golf Course

For details and to apply, please see <http://www.horticulturecertificates.com/>.

#### The Horticulturist Certificate

This online certificate is designed especially for gardeners wishing to enhance their knowledge and skills relating to the residential garden environment. The impact of soil conditions are a critical aspect of this study program. Basic horticulture and botany is discussed as are principles of plant care for ensuring optimum health. Students will learn about common plant pests and diseases and their effective treatments. They will begin to create beautiful and hardy landscapes through innovative residential garden design tactics and strategies.

#### Required Courses:

Cultural Practices for Plants  
Introduction to Plant Identification or Landscape Plants  
Designing the Landscape  
Ornamental Plant Protection  
Introduction to Soil and Plant Growth  
Weed Management in Horticulture  
Growing Plants

For details and to apply, please see <http://www.horticulturecertificates.com/>.

### Growing Plants for Profit Certificate

In the Growing Plants for Profit Certificate, students will learn how to effectively grow healthy crops while at the same time implementing sound business practices. Plant propagation techniques are thoroughly discussed as are the specifics of both greenhouse and nursery production. Business skills are offered to guide students through the complexities of running a profitable business operation. Plant identification techniques ensure that learners have a good understanding of the most exciting product choices.

#### Required Courses:

Commercial Floriculture  
Landscape Plants or Introduction to Plant Identification  
Greenhouse Management  
Nursery Production  
Plant Propagation  
Business Management Principles

For details and to apply, please see <http://www.horticulturecertificates.com/>.

### Sustainable Landscape Certificate

The Sustainable Landscapes Certificate is designed for students who wish to learn about innovative strategies which help fortify the relationships between water and land, ensuring care of both environments. Design tactics to retain or enhance naturalized landscapes will be examined. Students will gain knowledge about tree health as it relates to both the individual plant and woodland communities.

#### Required Courses:

Land and Water Resources  
Landscape Plants or Introduction to Plant Identification  
The Naturalized Landscape  
Conserving Woodlands  
Arboriculture

For details and to apply, please see <http://www.horticulturecertificates.com/>.

### Professional Association Affiliations

Several courses have been approved by the following associations and may be applied to each association's respective professional programs:

Association of Administrative Assistants  
Canadian Golf Superintendents Association  
Canadian Payroll Association  
Crop Life  
Golf Course Superintendents Association of America  
Human Resources Professionals Association of Ontario  
Industrial Accident Prevention Association  
Integrated Pest Management - Plant Health Care Council  
Ontario Association of School Business Officials  
Ontario Association for Marriage & Family Therapy  
Ontario Independent Meat Processors  
Purchasing Management Association of Canada

### Summer Studies (Summer Semester)

Because the university operates on a three semester system, a broad range of course offerings is 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-campus and off-campus. In addition to regular semester courses running from May to August, there is a summer session (May to June) when degree courses are offered in a six week format. For scheduling information consult the Undergraduate Timetable, available from the Academic Records Section, in the University Centre, Level 3.

Distance education opportunities are also available during the summer. For further details, contact the Office of Open Learning, Room 160, Johnston Hall, by email: [info@open.uoguelph.ca](mailto:info@open.uoguelph.ca), by phone (519) 767-5000 or <http://www.open.uoguelph.ca/>.

## 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 <<https://webadvisor.uoguelph.ca/>> 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.

Some courses are offered in the Guelph-Humber degree program and on the Humber campus only. Those courses will be identified in the course restriction information. See the University of Guelph-Humber web site at for more information about the Guelph-Humber degree programs (<http://www.guelphhumber.ca/>).

#### 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 desirable 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

**Equates** - 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 over-lap 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).

## Agricultural Economics

*Department of Agricultural Economics and Business*

### AGEC\*1100 Introduction to Business F (3-0) [0.50]

This course provides an overview as well as a foundation in the fundamentals of business management. The basic functions of business and management to be examined include: operations, human resources, marketing, finance, and strategic management. Small Business and entrepreneurship are also studied, along with other forms of business ownership, competition within a global economy, and the political and economic realities of business in Canada today. Students will develop basic competencies in business management through assignments and case studies requiring the practice of learned theory.

*Equate(s):* BADM\*1000

*Restriction(s):* Registration in BBRM.

### AGEC\*2110 Sales and Society F (3-2) [0.50]

The course is geared towards the global impact of trade on local sales environments. Students will learn the selling techniques and skills necessary to assess sales scenarios and react accordingly. Sales presentations will be covered extensively as well as buyer motivation and behaviour. Students will have ample opportunity to practice their sales skills through real-world cases and role-playing activities. (First offering is Fall 2007.)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### AGEC\*2220 Financial Accounting F,W (3-0) [0.50]

An introductory course designed to develop an understanding of current accounting principles and their implication for published financial reports of business enterprises. The course approaches the subject from the view of the user of accounting information rather than that of a person who supplies the information.

*Prerequisite(s):* 1 of ECON\*1050, ECON\*1100, ECON\*1210, ENGG\*3240

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

### AGEC\*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):* AGECE\*2220

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

### AGEC\*2300 Organic Marketing F,W (3-0) [0.50]

Economic theory of markets principles are applied to the marketing of organically-produced and processed products, through exploring open market price formation, value added, marketing margins, alternative marketing outlets and branding. Adherence to organic production and marketing standards, quality management, supply chain management, and advertising and promotion issues are also addressed. (Offered in distance education format only.)

*Prerequisite(s):* MCS\*1000 or ECON\*1050

### AGEC\*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):* AGR\*2400

*Co-requisite(s):* ECON\*2310

*Restriction(s):* AGR\*2402

### AGEC\*2700 Survey of Natural Resource Economics F (3-1) [0.50]

Natural resources in broad economic perspective. A discussion of factors that shape decisions concerning their use (or misuse), with illustrations of topical interest. This course is not normally offered to 7th or 8th semester students.

*Prerequisite(s):* ECON\*1050 or ECON\*1210

### AGEC\*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

### AGEC\*3310 Operations Management F,W (2-1) [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):* AGECE\*2220

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

### AGEC\*3320 Financial Management 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.

*Prerequisite(s):* 1 of AGECE\*2230, HAFA\*3070, HTM\*3070

*Restriction(s):* Registration in BCOM programs, BA Management Economics programs, BA area of emphasis Economic & Business Development.

### AGEC\*3330 Intermediate Accounting F (3-0) [0.50]

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.

*Prerequisite(s):* 10.00 credits including AGECE\*2220

### AGEC\*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

### AGEC\*4210 World Agriculture and Economic Development F (3-0) [0.50]

The role of agriculture in economic development. Analyses of economic policies and programs in developing countries and their effect on economic development.

*Prerequisite(s):* 10.00 credits including ECON\*1050 and ECON\*1100

### AGEC\*4220 Advanced Farm Management W (2-3) [0.50]

A course oriented toward practical application of theory and analytical principles to the identification, analysis and solution of farm business organization/management problems. Students work on a major farm project as management consultants with a farm owner/operator. The course builds upon students' prior training in accounting, finance, mathematical analysis, computer applications, economics, agriculture and farm management.

*Prerequisite(s):* 1 of AGECE\*2410, AGECE\*3320, AGR\*2402, ECON\*2770, instructor's consent

### AGEC\*4240 Futures and Options Markets W (3-0) [0.50]

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):* 1 of AGECE\*2410, AGECE\*3320, AGR\*2402, ECON\*3560, ECON\*3660

### AGEC\*4250 Business Policy F,W (3-0) [0.50]

Business policy 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 analytic tools and factual knowledge from all other courses in analyzing comprehensive business problems.

*Prerequisite(s):* AGECE\*3310, AGECE\*3320, ECON\*3560

*Restriction(s):* Registration in semester 6 or higher. Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

### AGEC\*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. (Offered in even-numbered years.)

*Prerequisite(s):* AGECE\*2700 or ECON\*2310

**AGEC\*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. The learning objective for the course is the development of critical thinking skills. The readings emphasize original sources. Students are expected to conduct original research on some aspect of the role of property rights and related institutions in the resolution of a current natural resource stewardship problem.

*Prerequisite(s):* 1 of AGECE\*2700, ECON\*2310, ECON\*2100, instructor consent

**AGEC\*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):* 0.50 credits in statistics

**AGEC\*4370 Marketing Management F,W (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. 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, (AGEC\*2230 or MCS\*2600)

*Equate(s):* MCS\*4370

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

**AGEC\*4410 Sales and Sales Management W (3-0) [0.50]**

This course is designed to develop professional selling skills. It includes the development of background knowledge in sales techniques as well as the application of this material to professional selling. Students will learn to plan, execute, and evaluate sales programs.

*Prerequisite(s):* 10.00 credits

**AGEC\*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

**AGEC\*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 AGECE\*2410, AGECE\*2700, AGR\*2401/2

*Restriction(s):* Permission of the instructor and Chair of the Department of Agricultural Economics and Business is required.

**AGEC\*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 AGECE\*2410, AGECE\*2700, AGR\*2401/2

*Restriction(s):* Permission of the instructor and Chair of the Department of Agricultural Economics and Business is required.

## Agriculture

*Ontario Agricultural College, Dean's Office*

### AGR\*1050 Communication Skills W (3-2) [0.50]

Students will develop written language skills, oral communication, and presentation skills. The development of practical skills includes writing business letters and other business correspondence, formal and informal reports, instructional writing, critical thinking and critical writing. Students will present and deliver a variety of information and persuasive oral presentations.

*Restriction(s):* Registered in B.B.R.M. Instructor consent required.

*Location(s):* Ridgetown

### AGR\*1100 Introduction to the Agrifood Systems F (2-3) [0.50]

This course examines current events within various production and maintenance sectors in an effort to gain up-to-date knowledge and analytical skills when dealing with issues in agri-food, landscape and associated industries.

*Restriction(s):* AGR\*1150 , UNIV\*1500 , enrolment in the B.Sc. (Agr.), B.COMM. (Ag. Bus.), or B.A. (Ag. Ec.) program

### AGR\*1250 Agrifood System Trends & Issues W (3-2) [0.50]

The course examines the complexities and contributing factors within the food system, production agriculture and landscapes management. From producer to consumer, students will examine ways in which each stage of a system process is empowered by various inputs as well as directed by various influences.

### AGR\*2100 Human Resource Management W (3-2) [0.50]

This course will introduce students to theoretical and practical skills of management and interacting with people. Topics will include recruiting, supervising, motivation, training employees, effective listening, dealing with difficult people, group dynamics and leadership skills. (First offering is Winter 2008.)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### AGR\*2320 Soils in Agroecosystems F (3-3) [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):* BIOL\*1040, CHEM\*1040, MATH\*1080

*Restriction(s):* AGR\*2301/2 , SOIL\*2010

### AGR\*2350 Animal Production Systems and Industry F (3-3) [0.50]

This course is designed to give students an overview of animal production systems and will consist of lectures dealing with major farm livestock species. Laboratories correlate with lectures and involve field trips, video and computer analyses of production alternatives.

*Prerequisite(s):* BIOL\*1030 or BIOL\*1040

### AGR\*2400 Economics of the Canadian Food System F (3-1) [0.50]

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.

*Prerequisite(s):* AGR\*1250, ECON\*1050

*Restriction(s):* AGR\*2401/2

### 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, sub-tropical and tropical crops and cropping systems. Labs include problem-solving exercises in the context of plant production.

*Prerequisite(s):* BIOL\*1030

*Restriction(s):* AGR\*2451/2

### AGR\*2500 Field Trip in International Agriculture W (3-0) [0.50]

A 2 week field study program to Costa Rica costing approximately \$2000 per student in addition to regular tuition fees during winter semester reading week. Students will visit corporate and individual farms, university and government research stations and become familiar with agricultural production systems. Projects and/or assignments will be completed during the winter semester. Classes are scheduled to meet once a week in the evening during the winter semester. It is important that students identify their interest in taking this course by contacting the OAC Dean's Office in September of the previous year. A deposit of \$875 in the form of a cheque made payable to the University of Guelph must be in the OAC Dean's Office by November in order to confirm a reservation for travel arrangements. Scholarship support is available to B.SC.(AGR.) students through the Cavers Memorial Scholarship and the Wolff International Scholarships. Applications are due in Student Financial Services, Office of Registrarial Services by April 1. This course must be recorded as part of your Winter course selection and tuition and compulsory fees will be calculated accordingly.

*Prerequisite(s):* AGR\*1250 or registration in International Development

*Restriction(s):* Registration in B.Sc.(Agr.) or B.A.(I.D.). Instructor consent.

### 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 science or course(s) on an approved study abroad or exchange program at an accredited university. The topic of the special study will be determined in consultation with an OAC 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

### AGR\*3500 Experiential Education F (0-0) [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 B.SC.(Agr.) and Agricultural Business students. Interested students in other programs should consult the OAC Dean's Office.

*Prerequisite(s):* 5.00 credits

### AGR\*4000 Seminar in International Agriculture W (3-0) [0.50]

A seminar course dealing with various aspects of international agricultural development programs. Normally taken in the final semester.

*Prerequisite(s):* AGR\*2500 or 1.00 credits in International Agriculture or registration in International Development

### AGR\*4010 Special Studies in Agricultural Science II 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 science. The topic of the special study will be determined in consultation with an OAC 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's consent.

### AGR\*4050 Professionalism and Agrology W (3-0) [0.50]

This course is designed for students in the final year of the B.SC.(Agr.) program who wish to understand the responsibilities of professionals in agrology and the responsibilities that professional organizations have in Ontario and Canada. The course is offered in conjunction with the Ontario Institute of Agrologists and will be offered in a series of ten 3-hour evening sessions. The first three sessions will deal with the topics of professionalism, ethics and professional development and utilize materials prepared jointly by the OIA and OAC Access. The remainder of the course will be comprised of discussions of ethical issues and workshops that will help students develop their personal professional development plan, improve their personal resume, and provide a framework for identifying potential professional employment opportunities.

*Prerequisite(s):* 15.00 credits

**AGR\*4450 Research Project in Agriculture I S,F,W (0-12) [1.00]**

Independent study of a current topic in Agriculture designed to encourage senior undergraduates to conduct research in Agriculture. 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. Open to students in semesters 6, 7, and 8 of the B.SC. (Agr.) degree program. This course will normally be followed by AGR\*4460 to provide 2 semesters to complete the research project.

*Prerequisite(s):* completion of semester 5 of the B.Sc. (Agr.) program, 70% cumulative average

*Restriction(s):* AGR\*4400 , permission of the course coordinator (contingent on the availability and agreement of a faculty advisor)

**AGR\*4460 Research Project in Agriculture II S,F,W (0-12) [1.00]**

Independent study of a current topic in Agriculture designed to encourage senior undergraduates to conduct research in Agriculture. 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 7 and 8 of the B.SC. (Agr.) degree program.

*Prerequisite(s):* AGR\*4450

*Restriction(s):* AGR\*4500, permission of the course coordinator and faculty advisor

**AGR\*4500 Agrifood Industry Problem-Solving W (1-6) [0.50]**

This course will provide senior level students in agricultural and related sciences with experience in working as a team to propose solutions to agrifood industry problems. The perspective of the best solution will be the agrifood system rather than any individual stakeholder group. Attention will be given to integrating material from different disciplines, further refining skills in problem-solving, and communication. Students and faculty will meet prior to the conclusion of the preceding semester to identify industry projects, student expertise, and to develop a preliminary strategy.

*Prerequisite(s):* 3.50 credits at the 3000 level or 1.50 credits at the 4000 level in any agricultural science area or agricultural business area.

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## **Anatomy**

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*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 and Poultry Science*

### **ANSC\*2200 Principles of Aquaculture F (3-0) [0.50]**

An introduction to the major principles of fish husbandry and preventive medicine as it relates mainly to the production of finned fish in Canada. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.50 credits in biology

### **ANSC\*2330 Horse Management Science F (3-2) [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. Laboratories are designed to familiarize the student with current management and handling techniques in addition to augmenting information presented in lectures.

*Prerequisite(s):* BIOL\*1040 or consent of the instructor

### **ANSC\*2340 Structure of Farm Animals W (3-3) [0.50]**

An introduction to the carcass structure of cattle, pigs, sheep and poultry. Animal growth and development are considered in relation to meat production. Practical work includes slaughtering of livestock. The course is for students intending to major in Animal Science.

### **ANSC\*2360 Challenges and Opportunities in Animal Production F (2-3) [0.50]**

This course consists of lecture presentations on current aspects of beef cattle, dairy cattle, swine and poultry production. Selected projects in these areas expose students to the practical application of animal science to production systems.

*Prerequisite(s):* AGR\*2350

*Restriction(s):* AGR\*2360 . Registration in B.Sc.(Agr.), B.Comm.(Ag.Bus.), or B.Sc. Animal Biology.

### **ANSC\*3080 Agricultural Animal Physiology F (3-3) [0.50]**

This course is an introduction to the physiology of domesticated farm mammals and birds. The course will emphasize homeostatic control of the major body systems. The lectures cover the nervous, cardiovascular, respiratory, urinary, immune, digestive, endocrine and reproductive systems. The lectures and laboratories are closely integrated.

*Prerequisite(s):* BIOC\*2580

### **ANSC\*3120 Introduction to Animal Nutrition F (3-2) [0.50]**

The application of principles of nutrition to the development of diets and feeding programs for the various species of animals of agricultural importance. Department of Animal and Poultry Science.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

### **ANSC\*3150 Principles of Farm Animal Care and Welfare W (3-0) [0.50]**

Students will be introduced to the main theoretical concepts of bioethics as related to contemporary animal agriculture. They will be familiarized with the history of the animal welfare movement, including its effect on producers and consumers of animal products. The course will emphasize the techniques of assessment of animal well-being and review legal requirements and voluntarily accepted codes for sound animal care and safe animal handling.

*Prerequisite(s):* 7.50 credits including AGR\*2350 or AGR\*2351/2

### **ANSC\*3170 Nutrition of Fish and Crustacea W (3-0) [0.50]**

The nutrition of fish and crustaceans with emphasis on those species used in aquaculture. Nutritional biochemistry, nutritional pathology and comparative nutrition of cold blooded, ammonotelic animals mainly carnivorous, contrasted with warm blooded ureotelic omnivores. (Offered in even-numbered years.)

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

*Equate(s):* NUTR\*3340

### **ANSC\*3180 Wildlife Nutrition W (3-0) [0.50]**

A study of the nutrition of avian and mammalian wildlife with emphasis on North American species. The role of nutrition in survival and population growth of wildlife in their natural habitat. Formulation of diets for wild species in captivity.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

*Equate(s):* NUTR\*3350

### **ANSC\*3300 Animal Reproduction W (3-0) [0.50]**

The course supplies basic knowledge to aid in the explanation of reproductive phenomena in domestic animals. Special attention will be given to the regulatory mechanisms of male and female fertility.

*Prerequisite(s):* ANSC\*3080

*Restriction(s):* ANSC\*4120

### **ANSC\*4050 Biotechnology in Animal Science F (3-2) [0.50]**

Starting from the principles of recombinant DNA, DNA marker identification, stem cell and generation of transgenic animals, the course provides an overview on how biotechnology has impacted biomedical science and animal production. The current challenges and potential opportunities in this field are discussed.

*Prerequisite(s):* MBG\*2000

### **ANSC\*4090 Applied Animal Behaviour F (3-0) [0.50]**

This course deals with why farm animals behave as they do with reference to causation, function, ontogeny and phylogeny. Basic principles are illustrated by examples taken from all the common agricultural species. Emphasis is placed on the application of behavioural knowledge to improve 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

*Restriction(s):* ANSC\*4070

### **ANSC\*4100 Environmental Management and Animal Productivity W (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

*Restriction(s):* ANSC\*4080

### **ANSC\*4130 Reproductive Management and Technology W (3-2) [0.50]**

Management of reproductive events at the farm level in the major classes of domestic livestock. An introduction to modern and emerging reproductive technologies as these relate to livestock propagation.

*Prerequisite(s):* ANSC\*4120

### **ANSC\*4260 Beef Cattle Nutrition W (3-0) [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

*Restriction(s):* ANSC\*4160

### **ANSC\*4270 Dairy Cattle Nutrition W (3-0) [0.50]**

This course is designed to apply principles of dairy cattle nutrition to solving on-farm nutritionally based problems. A case study approach will be used in conjunction with computer modeling and computer ration formulation programs.

*Prerequisite(s):* ANSC\*3120

*Restriction(s):* ANSC\*4170

### **ANSC\*4280 Poultry Nutrition F (3-0) [0.50]**

This course is designed to evaluate nutrient requirements of poultry. Students will learn how to apply feeding programs for meat, laying birds and breeders and how feeding affects poultry meat and egg composition.

*Prerequisite(s):* ANSC\*3120

*Restriction(s):* ANSC\*4180

### **ANSC\*4290 Swine Nutrition F (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

*Restriction(s):* ANSC\*4190

### **ANSC\*4350 Experiments in Animal Biology W (0-6) [0.50]**

This course provides an opportunity for hands-on projects involving live animals and laboratory techniques. Projects will be provided by APS faculty within their broad fields of study, for example animal behaviour and welfare, environmental physiology, endocrinology, and reproduction. Approval of the ABIO Faculty Advisor must be obtained before course selection.

*Prerequisite(s):* ANSC\*3080, ANSC\*3300, ANSC\*4090

*Co-requisite(s):* ANSC\*4100, ANSC\*4490

*Restriction(s):* Registration in Animal Biology Major. Instructor consent required.

### **ANSC\*4470 Animal Metabolism W (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\*3190 or NUTR\*3210

**ANSC\*4490 Applied Endocrinology W (3-0) [0.50]**

This course examines the endocrine systems of farm animals and their applications to livestock production. Considerable emphasis will be placed upon understanding how knowledge of endocrine regulation can be applied within animal production systems.

*Prerequisite(s):* ANSC\*3080

*Restriction(s):* ANSC\*4480

**ANSC\*4550 Horse Nutrition W (3-0) [0.50]**

This course is designed to provide students with the most current knowledge of nutrition of horses and other domestic non-ruminant herbivores. Influence of nutrition on musculo-skeletal development and function will be emphasized.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

*Restriction(s):* ANSC\*4500

**ANSC\*4560 Pet Nutrition F (3-0) [0.50]**

This course covers nutrient requirements, feed formulation and nutritional idiosyncrasies for dogs, cats, and exotic pets.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

*Restriction(s):* ANSC\*4510

**ANSC\*4610 Critical Analysis in Animal Science W (3-0) [0.50]**

Each student will select and critically review a topic of emerging importance in animal science. The topic will be presented to the group as a written paper in journal format, as a poster, and as a formal seminar. This course is designed for students in their final year of the Animal Biology Major.

*Prerequisite(s):* 12.00 credits including 2.00 in animal sciences

**ANSC\*4650 Immune Mechanisms of Animals W (3-0) [0.50]**

Livestock and fish have developed common and unique defense strategies for resisting microbial and viral infections. The focus of this course is to review and compare these defense mechanisms in different tissues, and describe the significance of neuroendocrine signalling, genetic polymorphisms, nutrition and food-borne toxins, and host-microbial interaction in regulating innate and acquired immune responses and disease resistance.

*Prerequisite(s):* ANSC\*3080

**ANSC\*4700 Research in Animal Biology I S,F,W (0-6) [0.50]**

This course is an opportunity for those students potentially interested in postgraduate studies to work with a committed faculty advisor to research a problem, analyse data and/or design experiment(s) that address a solution. Evaluation of the course requires a substantive literature review and/or data analysis. Selection of a faculty supervisor and approval from course coordinator must be obtained before course selection.

*Prerequisite(s):* 14.00 credits

*Restriction(s):* Registered in Animal Biology Major. Instructor consent required.

**ANSC\*4710 Research in Animal Biology II S,F,W (0-6) [0.50]**

This course is a continuation of ANSC\*4700, Research in Animal Biology I. It allows more sophisticated projects to be undertaken or to provide an opportunity to build upon the work of ANSC\*4700. Evaluation of the course requires a greater emphasis on data analysis or experimental design than for ANSC\*4700. Selection of a faculty advisor and approval of course coordinator must be obtained before course selection.

*Prerequisite(s):* 14.00 credits

*Restriction(s):* Registration in Animal Biology Major. Instructor consent required.

## 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\*.

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.

Anthropology credit may also be given for some Sociology courses, with the exception of SOC\*3840 through SOC\*4910 inclusive. See a Sociology/Anthropology Faculty Advisor for approval of substitutions.

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.

#### ANTH\*1150 Introduction to Anthropology S,F,W (3-0) [0.50]

An introductory course dealing 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. (Also offered through distance education format.)

#### ANTH\*2160 Social Anthropology W (3-0) [0.50]

This course will cover basic concepts that contribute to various anthropological approaches to the study of culture and society, such as the case study method and participant observation. The development of theory and methods will be examined through reading selected classic and contemporary ethnographies.

*Prerequisite(s):* ANTH\*1150

#### ANTH\*2230 Regional Ethnography F (3-0) [0.50]

This course offers a survey of ethnographic studies on selected cultural/geographical areas 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. Focus may be given to such areas as Latin America, Sub-Saharan Africa, Asia, or Oceania.

*Prerequisite(s):* ANTH\*1150

*Restriction(s):* ANTH\*4230

#### ANTH\*2660 Contemporary Native Peoples of Canada W (3-0) [0.50]

An analysis of the impact of Euro-Canadian society on native culture. Particular emphasis will be given to contemporary issues relating to Canadian native peoples (Indians, Inuit and Metis) such as education, treaties and reserves, land claims, government administration and economic development. (Offered in even-numbered years.)

*Prerequisite(s):* ANTH\*1150 or SOC\*1100

#### ANTH\*3400 The Anthropology of Gender W (3-0) [0.50]

This course will address theoretical innovation in the discipline of socio-cultural anthropology in the study of gender and feminist issues on the basis of cross-cultural ethnographic case studies. Theoretical problems such as gender inequality, complementarity, the domestic/public divide, ritual and symbolic valuations and the division of labour will be considered in the context of cultural relativity. (Offered in even-numbered years.)

*Prerequisite(s):* 10.00 credits including (ANTH\*2160 or SOAN\*2400), (SOAN\*2120 or WMST\*3000)

#### ANTH\*3650 Prehistory of Canadian Native Peoples F (3-0) [0.50]

This is a course in Aboriginal studies which uses archaeological, ethno-historical and contemporary research to examine the culture and social organization of First Nations peoples in Canada from their early beginnings to European contact.

*Prerequisite(s):* ANTH\*2160, (ANTH\*2230 or ANTH\*2660)

*Restriction(s):* ANTH\*2650

#### ANTH\*3670 Indigenous Peoples: Global Context W (3-0) [0.50]

This course will focus on aboriginality as a political and cultural identity. Historical, political, and cultural similarities between indigenous peoples the world over will be traced and key issues such as assimilation, cultural survival, protection of the commons, and the environment and cultural identity within the nation state will be examined. International organizations of indigenous peoples will be considered as well as other forms of transnational assertions of common identity and resistance. (Offered in odd-numbered years.)

*Prerequisite(s):* (1 of ANTH\*2160, ANTH\*2230, ANTH\*2660, SOC\*2660, IDEV\*2010), SOAN\*2120

#### ANTH\*3690 History of Anthropological Thought F (3-0) [0.50]

This course offers a historical survey of the main trends in anthropological theory from the 19<sup>th</sup> century to the present.

*Prerequisite(s):* ANTH\*2160, ANTH\*2230, SOAN\*2120

#### ANTH\*3770 Kinship and Social Organization W (3-0) [0.50]

This course will deal with the theoretical implications of the study of kinship systems for an analysis of human society in general, including a comparative study of the social organization of kinship-based societies.

*Prerequisite(s):* ANTH\*2160, ANTH\*2230, SOAN\*2120

#### 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

#### 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

#### 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 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.

#### ANTH\*4300 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

#### 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, SOAN\*3070

#### ANTH\*4540 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):* 12.50 credits including (ANTH\*3690 or SOC\*3310), SOAN\*3070

#### ANTH\*4640 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):* 12.50 credits including (ANTH\*3690 or SOC\*3310), SOAN\*3070

#### ANTH\*4700 Issues in Contemporary Anthropological Theory W (3-0) [0.50]

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.

*Prerequisite(s):* 12.50 credits including ANTH\*3690, SOAN\*3070

**ANTH\*4740 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):* 12.50 credits including (ANTH\*3690 or SOC\*3310), SOAN\*3070

**ANTH\*4840 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):* 12.50 credits including (ANTH\*3690 or SOC\*3310), SOAN\*3070

**ANTH\*4880 Special Projects in Anthropology S,F,W (3-0) [0.50]**

This special study/reading course option 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 project is required.

*Prerequisite(s):* 12.50 credits

*Restriction(s):* Instructor consent required. Please note, a student is allowed a total of 1.00 credits only for reading courses.

**ANTH\*4890 Special Projects in Anthropology S,F,W (3-0) [0.50]**

This special study/reading course option 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 project is required.

*Prerequisite(s):* 12.50 credits

*Restriction(s):* Instructor consent required. Please note, a student is allowed a total of 1.00 credits only for reading courses.

**ANTH\*4900 Honours Anthropology Thesis I S,F,W (3-0) [0.50]**

Development and design of an honours thesis proposal conducted under the supervision of a faculty member. Recommended to honours major students.

*Prerequisite(s):* 15.00 credits including ANTH\*3690, (SOAN\*3070 or SOAN\*3120)

*Restriction(s):* Instructor consent required. As well as a cumulative average of 70% in all Sociology and Anthropology courses.

**ANTH\*4910 Honours Anthropology Thesis II S,F,W (3-0) [0.50]**

Completion and presentation of honours thesis.

*Prerequisite(s):* ANTH\*4900

*Restriction(s):* Instructor consent required.

## 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.*

#### **ARTH\*1220 The Visual Arts Today F (3-0) [0.50]**

An introduction to contemporary visual culture, its current controversies and its historical roots. The avant-grade 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.

#### **ARTH\*1510 Art Historical Studies I F (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 technology, as well as on various ways of looking at the visual past and present. Focus will be on the visual arts from prehistory through the Middle Ages.

#### **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.

#### **ARTH\*2050 Modern Latin American Art F (3-0) [0.50]**

An exploration of Latin American art in the context of cultural, social and political experience, with emphasis on the work of the painter Frida Kahlo, the Mexican muralists, performance artists Guillermo Gomez-Pena and Coco Fusco, and other important contemporary artists who have represented identity, culture, and political experience as complex and multifaceted because they have lived between nations and cultures.

#### **ARTH\*2060 Aboriginal Arts in the Americas W (3-0) [0.50]**

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.

#### **ARTH\*2070 Art of the USA F (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.

#### **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.

#### **ARTH\*2150 Art and Archaeology of Greece F (3-0) [0.50]**

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).

*Equate(s):* CLAS\*2150

#### **ARTH\*2280 Modern Architecture W (3-0) [0.50]**

An investigation of architectural theory and practice within the social and spatial complexities of national and international life.

#### **ARTH\*2290 History of Photographic Media W (3-0) [0.50]**

An introduction to the history of photography through to its application in contemporary visual arts.

#### **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 of ARTH\*1220, ARTH\*1510, ARTH\*1520), (1 of SART\*1050, SART\*1060)

#### **ARTH\*2490 History of Canadian Art F (3-0) [0.50]**

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 great variety of different cultural origins.

#### **ARTH\*2540 Medieval Art F (3-0) [0.50]**

The 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" are presented in this course.

#### **ARTH\*2550 The Italian Renaissance F (3-0) [0.50]**

An investigation of the myths and realities of the Renaissance in the visual arts. The artists to be studied will include Giotto, Duccio, Ghiberti, Donatello, Alberti, the Bellini, Verrocchio and Michelangelo. Their careers will be placed against the theoretical beginnings of art writing and the intricate relationships of the emerging city-states of Siena, Florence, Milan, and the republic of Venice.

#### **ARTH\*2580 Late Modern Art: 1900-1950 F (3-0) [0.50]**

A study of the historical avant-gardes in the social and political contexts of the period 1900-1950.

#### **ARTH\*2600 Early Modern Art to 1900 W (3-0) [0.50]**

A study of visual culture as it was transformed by the revolutions - industrial, political, and colonial - of the eighteenth and nineteenth centuries. (Offered in even-numbered years.)

#### **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.

#### **ARTH\*3010 Contemporary Canadian Art W (3-0) [0.50]**

The wide range of contemporary Canadian visual arts, from painting to new technological 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. (Offered in odd-numbered years.)

*Prerequisite(s):* 10.00 credits

#### **ARTH\*3050 Pre-Columbian Art F (3-0) [0.50]**

A detailed investigation of the history and artistic traditions of pre-contact America with special focus on selected cultural areas. The course will bring together such perspectives as archaeology, art history and ethnography.

*Prerequisite(s):* 10.00 credits

#### **ARTH\*3060 Public Art W (3-0) [0.50]**

An investigation of what constitutes the "public" and the "private" domain in the arenas of art and visual culture. Provocative iconography, matters of race, nationality, sexuality, language, and identity in artistic practice, issues of censorship, controversial shows and exhibitions, the ethics of propriety and impropriety will be considered. Artists such as Linda Montano, Andres Serrano, Keith Haring, Annie Sprinkle, Robert Mapplethorpe and others will be discussed.

*Prerequisite(s):* 10.00 credits

#### **ARTH\*3100 Perspectives: Structure and Space in Renaissance and Baroque Art F (3-0) [0.50]**

An investigation of the visual arts in Europe in the 16th and 17th centuries with special emphasis on issues of illusionism, mimesis, and the representation of space. (Offered in even-numbered years.)

*Prerequisite(s):* 10.00 credits

*Restriction(s):* ARTH\*3560

#### **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). (Offered in even-numbered years.)

*Equate(s):* CLAS\*3150

*Restriction(s):* ARTH\*3530 , ARTH\*4500

#### **ARTH\*3200 Colour: Practice and Meanings in Western Art W (3-0) [0.50]**

An exploration of the role colour has played in the work of selected artists and periods.

*Prerequisite(s):* 10.00 credits including two from the Western art area of focus.

#### **ARTH\*3210 Critical Issues in Art History F (3-0) [0.50]**

An investigation of art and its histories. Art writing, art history, and art historical methodology will be examined through the work of key art historians, cultural critics, and philosophers such as Clement Greenberg, Rosalind Krauss, Griselda Pollock, and Jacques Derrida for example. Critical issues such as intention and reception, authorship, creativity and originality will be discussed. (Offered in odd-numbered years.)

*Prerequisite(s):* 10.00 credits

**ARTH\*3220 Nationalism and Identity in Art W (3-0) [0.50]**

A consideration of 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).

*Prerequisite(s):* 10.00 credits

**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

**ARTH\*3520 Idea: Art Since 1950 F (3-0) [0.50]**

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.

*Prerequisite(s):* 10.00 credits.

**ARTH\*3540 Image: The Arts in the Medieval Era W (3-0) [0.50]**

The role of images in sacred and secular contexts: manuscripts, reliquaries, architectural sculpture, tapestries, in Romanesque and Gothic Europe.

*Prerequisite(s):* 10.00 credits

**ARTH\*3550 Lives: Aspects of High Renaissance Art W (3-0) [0.50]**

A reading of Vasari will inform the investigation of artistic practices in painting, sculpture and architecture. Included will be issues of patronage, audiences, physical and social contexts, art and the household, art and technology, the complexities of Renaissance as period and place. Key artists will be Alberti, Brunelleschi, Leonardo da Vinci, Michelangelo, Raphael, Giorgione, Titian, Palladio, Vignola. (Offered in even-numbered years.)

*Prerequisite(s):* 10.00 credits

**ARTH\*3570 Display: Visual Culture in Late 19th Century Europe W (3-0) [0.50]**

The course will examine the radical transformations in Western painting, sculpture and architecture that occurred alongside the invention of museums, World's Fairs, photography, and the department store. Art movements to be studied will range from Realism, Impressionism and Post-Impressionism to Art Nouveau.

*Prerequisite(s):* 10.00 credits

**ARTH\*3640 Objects: Baroque Art and Rococo Art F (3-0) [0.50]**

Selected topics investigating the visual arts in Italy, Spain, and France. These may include the study of key practitioners, the development of a complex artistic theory that reflects patterns of local and national discourse and instruction in the arts, the emergence of female artists. Key artists are Caravaggio, Bernini, Artemisia Gentileschi, Borromini, Velazquez et al. (Offered in odd-numbered years.)

*Prerequisite(s):* 10.00 credits

**ARTH\*3780 Gender and Art W (3-0) [0.50]**

A consideration of how the practice and reception of the visual arts intersect with constructs of gender in contemporary contexts and in history.

*Prerequisite(s):* 10.00 credits

**ARTH\*4050 Seminar in the Americas I W (3-0) [0.50]**

Selected topics in the visual arts of the Americas with special emphasis on Pre-Columbian, Latin American, or Aboriginal arts.

*Prerequisite(s):* A minimum of 14.00 credits including 1 of ARTH\*2050, ARTH\*2060, ARTH\*3050, ARTH\*3220

**ARTH\*4060 Seminar in the Americas II F (3-0) [0.50]**

Selected topics in the visual arts of the Americas with special emphasis on the arts in Canada and the USA.

*Prerequisite(s):* A minimum of 14.00 credits including 1 of ARTH\*2070, ARTH\*2490, ARTH\*3010, ARTH\*3060, ARTH\*3220

*Restriction(s):* ARTH\*4250

**ARTH\*4150 Seminar in Western Art I W (3-0) [0.50]**

Selected topics in the area of Western Art with special emphasis on the European Middle Ages.

*Prerequisite(s):* A minimum of 14.00 credits including ARTH\*2540 or ARTH\*3540

**ARTH\*4160 Seminar in Western Art II F (3-0) [0.50]**

Selected topics in the area of Western Art with special emphasis on the Renaissance and Baroque.

*Prerequisite(s):* A minimum of 14.00 credits including 1 of ARTH\*2550, ARTH\*2950, ARTH\*3100, ARTH\*3550, ARTH\*3640

*Restriction(s):* ARTH\*4520

**ARTH\*4550 Questions in Criticism W (3-0) [0.50]**

Selected topics in the area of Art Theory, Critical Methodology and Museology.

*Prerequisite(s):* ARTH\*2480

**ARTH\*4600 Individual Study - Art History S,F,W (3-0) [0.50]**

Each student establishes, in consultation with the faculty member chosen, the content of this special study within the area of expertise of that instructor.

*Restriction(s):* This course is available with the approval of the Director for students who have completed their 5th semester and for whom there is no suitable course available.

**ARTH\*4620 Museum Studies W (3-0) [0.50]**

This seminar course will be offered in conjunction with the staff and facilities of the Macdonald Stewart Art Centre 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 Centre.

*Prerequisite(s):* 10.00 credits

**ARTH\*4850 Honours Thesis I S,F,W (0-9) [0.50]**

Under the guidance of a faculty member over two semesters (ARTH\*4850 in the first semester and ARTH\*4860 in the second semester), the honours student will research and complete a major independent project in art history or criticism for final approval by a faculty committee. Recommended for all honours students.

*Restriction(s):* Registration in semester 7 or 8 and a cumulative average of 70% in Studio and Art History courses. Instructor consent required.

**ARTH\*4860 Honours Thesis II S,F,W (0-9) [0.50]**

Continuation of ARTH\*4850.

*Prerequisite(s):* ARTH\*4850

*Restriction(s):* Instructor consent required.

## 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\*1000 Society and Science I: Historical Perspectives F (3-0) [0.50]**

This course explores historically the complex interrelations between science and society. It focuses on the ways in which science has both shaped, and been shaped by, its larger social and cultural contexts.

*Restriction(s):* HIST\*1250. Registration in the Bachelor of Arts and Sciences degree program.

### **ASCI\*1010 Society and Science II: Current Issues W (3-0) [0.50]**

This interdisciplinary course examines scientific and technological activities in modern society, including a number of current controversies. Case studies and debates will be used to examine the multiplicity of impacts and reactions to these activities.

*Prerequisite(s):* ASCI\*1000

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.

### **ASCI\*2000 Modes of Inquiry and Communication Across Disciplines F,W (3-0) [0.50]**

This course considers the process of inquiry and quest for knowledge in the natural and applied sciences, and the social sciences and humanities as they are constituted as disciplines within the modern university. The course will consider the social forces that shape inquiry, including funding for research, and consider the communication of findings, both inside and outside the academy.

*Prerequisite(s):* ASCI\*1000

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.

### **ASCI\*3000 Arts and Sciences Community Project W (0-3) [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

*Restriction(s):* ASCI\*3100. Registration in the Bachelor of Arts and Sciences degree program.

### **ASCI\*3100 Case Studies in Arts and Sciences Research F (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

*Restriction(s):* ASCI\*3000. Registration in the Bachelor of Arts and Sciences degree program.

### **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 Bachelor of Arts and Sciences degree program.  
Instructor consent required.

### **ASCI\*4000 Arts and Sciences Honours Seminar F,W (3-0) [0.50]**

This senior-level integrating course builds on the principles learned in ASCI\*2000, and requires research into an area of investigation relevant to the interdisciplinary focus of the program. Students will examine a topic from multiple theoretical and disciplinary perspectives, explore appropriate methodological approaches, prepare working bibliographies and annotations, and report on research. Students who take ASCI\*4010 will build on work completed in ASCI\*4000.

*Prerequisite(s):* 12.00 credits including ASCI\*2000

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.

### **ASCI\*4010 Arts and Sciences Honours Research Seminar W (3-0) [0.50]**

Under faculty supervision students will plan, develop, peer-edit and complete a major paper on a research topic developed in ASCI\*4000 or revised therefrom. 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):* ASCI\*4000

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.

### **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

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.

### **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

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.

### **ASCI\*4700 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 14.00 credits.

*Restriction(s):* Registration in the Bachelor of Arts and Sciences degree program.  
Instructor consent required.

### **ASCI\*4710 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 Bachelor of Arts and Sciences degree program.  
Instructor consent required.

## Biochemistry

*Department of Molecular and Cellular Biology*

### **BIOC\*2580 Introductory Biochemistry S,F,W (3-3) [0.50]**

The evolution, chemical structure, and biological roles of the major molecular components of the cell: proteins, nucleic acids, lipids, and carbohydrates, enzymology, intermediary metabolism, with emphasis on catabolic processes.

*Prerequisite(s):* CHEM\*1050 or CHEM\*2300

### **BIOC\*3560 Structure and Function in Biochemistry F,W (3-0) [0.50]**

This course develops the understanding of biochemical processes, by examining the enzymatic molecular mechanisms underlying specific cellular and physiological systems. Examples may include oxygen binding/transport and the evolution of globin genes/proteins; regulation of carbohydrate and lipid metabolism; proteins that change shape, including enzymes, membrane proteins, and prion proteins, blood clotting; neurotransmission.

*Prerequisite(s):* BIOC\*2580

### **BIOC\*3570 Analytical Biochemistry S,F (3-3) [0.50]**

The tools and techniques by which biological molecules are isolated, separated, identified, and analyzed. Detailed discussion of experimental methods for macromolecule purification characterization.

*Prerequisite(s):* (CHEM\*2400 or CHEM\*2480), BIOC\*2580

*Restriction(s):* MICR\*3110

### **BIOC\*4520 Metabolic Processes F (3-0) [0.50]**

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

### **BIOC\*4540 Enzymology W (3-4) [0.50]**

A laboratory-intensive course. 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

### **BIOC\*4580 Membrane Biochemistry W (3-0) [0.50]**

An examination at the molecular level of 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

## Biology

*Department of Human Health and Nutritional Sciences*

*Department of Integrative Biology*

*Department of Molecular and Cell Biology*

### **BIOL\*1020 Introduction to Biology F (3-2) [0.50]**

This course will introduce important concepts concerning the organization of life on our planet, from cells to ecosystems. The dynamic and interactive nature of all living systems will be emphasized. This course will be valuable for students without 12U or OAC biology who are interested in environmental issues, medicine, advances in biotechnology and related topics.

*Restriction(s):* BIOL\*1030, BIOL\*1040, or equivalent

### **BIOL\*1030 Biology I F,W (3-3) [0.50]**

A lecture and laboratory course which introduces the concepts and controversies in contemporary biology and their implications. Using an integrative approach, the course examines some of the basics of biology and two of the common challenges of life, acquisition and processing of nutrients and information flow. How these challenges are faced by animals, microbes and plants and the diversity of structures and processes that have evolved in response to them will be discussed. This is the first course in a two course biology series. When you select it, you are strongly advised to take the second course, BIOL\*1040, immediately thereafter. Material from BIOL\*1030 will be referred to in BIOL\*1040 to emphasize the integrated nature of biology. Students lacking 4U or OAC Biology should consult with their program counsellor prior to taking BIOL\*1030.

### **BIOL\*1040 Biology II W (3-3) [0.50]**

A continuation of BIOL\*1030. A lecture and laboratory course which continues with additional challenges of life faced by animals, microbes and plants and the diversity of structures and processes that have evolved in response to them. To indicate the value of biology to society, some topical issues in biology will be addressed. This is the second course in a two course biology series and should be taken immediately after successfully completing BIOL\*1030. Materials introduced in BIOL\*1030 will be built on and referred to in BIOL\*1040.

*Prerequisite(s):* BIOL\*1030

### **BIOL\*2060 Ecology F,W (3-1) [0.50]**

This is a basic course that presents a discussion of 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 tremendous 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. Department of Integrative Biology. (Also offered through distance education format.)

*Prerequisite(s):* BIOL\*1040

### **BIOL\*2210 Introductory Cell Biology S,F,W (3-0) [0.50]**

The structure and function of eukaryotic cells with emphasis on multicellular organisms. Role of subcellular structures and organelles in cellular processes of bioenergetics, division, differentiation, motility, secretion, nutrition, and communication. (Also offered through distance education format.)

*Prerequisite(s):* BIOL\*1040

### **BIOL\*2250 Biostatistics and the Life Sciences W (3-2) [0.50]**

This course in biostatistical methods will emphasize the design of research projects, data gathering, analysis and the interpretation of results. Statistical concepts underlying practical aspects of biological research will be acquired while working through the process of scientific enquiry. Weekly computer laboratory sessions will focus on practical data visualization and statistical analysis using computer statistical packages. Simple parametric and nonparametric methods are reviewed, followed by more advanced topics that will include some or all of the following: two factor ANOVA and multiple regression, and introductions to discriminant analysis, cluster analysis, principle components analysis, logistic regression, and resampling methods. (Also listed as STAT\*2250.) Departments of Mathematics and Statistics and Integrative Biology.

*Prerequisite(s):* STAT\*2040 or STAT\*2100

*Equate(s):* STAT\*2250

*Restriction(s):* STAT\*2050

### **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 in 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. Department of Integrative Biology.

*Prerequisite(s):* (BIOL\*1040 or BOT\*1150), STAT\*2040

*Co-requisite(s):* BIOL\*2060 or BIOL\*3110

### **BIOL\*3050 Mycology I W (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. Department of Integrative Biology and Department of Molecular and Cellular Biology.

*Prerequisite(s):* BOT\*2100 or MICR\*2030

*Restriction(s):* BOT\*3200, MICR\*3100

### **BIOL\*3110 Population Ecology F,W (3-1) [0.50]**

An exploration of the structure and dynamics of animal and plant populations. The first part of the course will focus on demographic characteristics of populations and simple models of population growth and natural regulation. The second part of the course will concentrate on a variety of population processes, including predator-prey interactions, spatial dynamics, and disease-host interactions, and consider how these processes affect population dynamics. A quantitative approach emphasizing the use of mathematical models, graphical analysis, and statistics will provide the basic conceptual framework, which will be illustrated by selected case studies. Department of Integrative Biology.

*Prerequisite(s):* (MATH\*1080 or MATH\*1200), STAT\*2040

### **BIOL\*3120 Community Ecology F,W (3-1) [0.50]**

A course on the structure and dynamics of communities, dealing with both theoretical and applied aspects of community ecology. Emphasis is on the modern quantitative view of community ecology, and on the development of problem-solving skills. Department of Integrative Biology.

*Prerequisite(s):* BIOL\*3110

### **BIOL\*3130 Conservation Biology W (3-0) [0.50]**

An introduction to the biological basis for the management of wild, living resources, including freshwater and marine fish and wild life. Topics will include an overview of processes related to resource population abundance and dynamics, theory and practice of sustained-yield harvesting, and conservation and restoration of endangered species and/or ecosystems. Both theoretical and applied aspects of resource management will be emphasized. Department of Integrative Biology.

*Prerequisite(s):* BIOL\*3110

### **BIOL\*3300 Applied Bioinformatics W (3-2) [0.50]**

New molecular genetic and information technologies have enabled biologists to produce and to access large and informative data sets. This course will provide an introductory understanding of the databases and methods used in computational molecular data analysis. Topics covered will include introducing the UNIX-related operating system, reviewing major molecular databases and their structures, constructing sequence alignments, constructing phylogenies, and finding motifs and genes in biological sequences. Lab sessions will include an introduction to Unix and Perl for the biologist and hands-on use of several molecular data analysis programs.

*Prerequisite(s):* MBG\*2020, (STAT\*2040 or STAT\*2100)

### **BIOL\*3450 Introduction to Aquatic Environments F,W (3-3) [0.50]**

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. Laboratory periods will centre around computer-based exercises and simulation of aquatic systems. Department of Integrative Biology. (Also offered through distance education format.)

*Prerequisite(s):* BIOL\*1040, (CHEM\*1050 or CHEM\*1310), ZOO\*2070 is strongly recommended

### **BIOL\*4050 Mycology II F (3-0) [0.50]**

This advanced course expands on subjects introduced in BIOL\*3050 and examines several selected topics concerning fungi and yeasts. Lecture presentations will emphasize the ecology of the fungi in natural environments, fungi pathogens of animals and plants, use of yeasts and fungi as model systems in biology, and other topics in contemporary mycology. Students will also prepare a review paper on a selected topic for class presentation. Department of Integrative Biology and Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOL\*3050

**BIOL\*4060 Restoration Ecology W (3-1) [0.50]**

An overview of the process used to restore naturally occurring ecological systems that have been degraded by human activity. Students will review restoration projects in Canada and abroad, to become more familiar with experimental design, analysis and data management, as it is currently used in restoration ecology. Emphasis will be placed on the scientific method and the role of ecological theory. Political, social, and economic aspects of restoration will also be considered. Department of Integrative Biology.

*Prerequisite(s):* BIOL\*2060 or (BIOL\*3110 and BIOL\*3120)

**BIOL\*4100 Molecular Evolution and Phylogenetics F (2-2) [0.50]**

This course is designed to provide students with an appreciation for the uses of molecular data in the study of evolutionary processes. An overview of the principles of molecular data analysis using a phylogenetic approach will be given. In addition, the importance of incorporating evolutionary history into biodiversity research and other applied topics will be emphasized. Laboratory sessions will be devoted to practical training in analytical tools using specialized computer software, and for student presentation of independent research projects. The course will involve practical training in molecular data analysis using a phylogenetic approach and discussion of current topics from the primary literature. Department of Integrative Biology.

*Prerequisite(s):* MBG\*3000 or ZOO\*3300

**BIOL\*4110 Ecological Methods F (3-3) [0.75]**

An advanced course designed to present theoretical and practical aspects of research methods in ecology. Emphasis will be placed on experimental design, sampling, population estimation, statistical inference, and community 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. Department of Integrative Biology.

*Prerequisite(s):* BIOL\*3010, BIOL\*3120, STAT\*2040

**BIOL\*4120 Evolutionary Ecology W (3-1) [0.50]**

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. There is a 1-hour seminar each week for class discussion of selected lecture topics. Department of Integrative Biology.

*Prerequisite(s):* BIOL\*3110, MBG\*2000, (MBG\*3000 or ZOO\*3300)

**BIOL\*4150 Wildlife Conservation and Management W (3-2) [0.50]**

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 single populations, long-term persistence of ecological communities, harvesting, bio-economics, and habit modification. Department of Integrative Biology.

*Prerequisite(s):* BIOL\*3110 or BOT\*2050

*Restriction(s):* ZOO\*4110

## 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\*2000 Concepts of Physiology F,W (3-0) [0.50]

An introductory course covering the fundamental integrative aspects of human physiology. The basic physiology of the cardiovascular, respiratory, gastrointestinal, nervous, endocrine, renal and reproductive systems will be discussed. (Also offered in distance education Format.)

*Restriction(s):* ANSC\*3080, BIOM\*3100, HK\*3940, ZOO\*3200, ZOO\*3210. Not available to B.Sc. Students in biological science specializations.

#### BIOM\*3000 Mammalian Neuroanatomy W (3-2) [0.50]

The basic organization of the mammalian nervous system. Includes 3 dimensional examination and dissection of the spinal cord, brain stem, cerebellum and cerebral hemispheres and study of serial sections. Emphasis is on the morphological basis of function.

*Prerequisite(s):* 1 of BIOL\*1040, PSYC\*2410, equivalent

#### BIOM\*3010 Laboratory Animal Anatomy F (2-3) [0.50]

The anatomy of common laboratory animals including primates. Emphasis is placed on similarities of the basic mammalian plan. Functional differences are considered. An introduction to avian anatomy is included.

*Prerequisite(s):* BIOL\*1040

#### BIOM\*3030 Biomedical Histology F (3-3) [0.75]

This histology course is designed for students with interests in Bio-Medical Sciences and Toxicology. Basic tissue types and major organ systems, will be examined focusing on structural/functional relationships. Human and common experimental mammals will be emphasized.

*Prerequisite(s):* BIOL\*2210, BIOC\*2580

*Restriction(s):* Priority Access Courses. Enrolment may be restricted to particular programs or specializations. See department for more information.

#### BIOM\*3040 Medical Embryology W (2-3) [0.50]

The patterns and principles of fertilization and normal embryonic and fetal development of mammalian organ systems are covered with a focus on the medical implications. The teratology of structural and functional prenatal anomalies in development is mentioned.

*Prerequisite(s):* BIOL\*1040 (an anatomy course is recommended)

#### BIOM\*3090 Principles of Pharmacology and Toxicology W (3-0) [0.50]

This course will introduce students to the basic principles of pharmacology and toxicology. Topics to be covered include receptor mechanisms, kinetics and the actions of drugs and toxins at the cellular, organ and organism level.

*Prerequisite(s):* BIOC\*2580, (BIOM\*3100 or HK\*3940)

*Co-requisite(s):* if BIOM\*3100 taken, BIOM\*3110

#### BIOM\*3100 Mammalian Physiology I F (3-0) [0.50]

The first part of a two-semester sequence. A series of lectures concerning the normal functioning of the body treating in a detailed manner the physiology of the nervous, endocrine, and reproductive systems.

*Prerequisite(s):* BIOC\*2580

#### BIOM\*3110 Mammalian Physiology II W (3-0) [0.50]

This second lecture course in mammalian physiology deals with the cardiovascular and digestive systems and with homeostasis as reflected in respiratory and renal function.

*Prerequisite(s):* BIOM\*3100 or instructor consent.

#### BIOM\*3120 Laboratory Exercises in Mammalian Physiology W (0-3) [0.25]

A series of laboratory exercises in which the students measure cardiovascular, neuromuscular and respiratory parameters on themselves using a computer based acquisition system. These exercises complement the lectures in BIOM\*3100, BIOM\*3110, and HK\*3940.

*Prerequisite(s):* BIOM\*3100 or HK\*3940

*Co-requisite(s):* BIOM\*3110

#### BIOM\*4010 Teratology F (2-3) [0.50]

The principles and practices of the study and analysis of birth defects in individuals and populations will be examined through lectures, lab projects and seminars. An on-going theme is the medical, social and moral/ethical impact of birth defects and testing for teratogenic safety.

*Prerequisite(s):* (1 of BIOM\*3010, HK\*3402, ZOO\*2090), (BIOM\*3040 or ZOO\*2100), (BIOM\*3120 or HK\*3940)

#### BIOM\*4020 Physiology of Digestion F (3-1) [0.50]

A comparative study of the function and control of the mammalian digestive system with an emphasis on domestic species and on the human. (Offered in even-numbered years.)

*Prerequisite(s):* 1 of BIOM\*3110, HK\*3940, ZOO\*3210, or instructor consent.

#### 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, 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\*3110, HK\*3940, (ZOO\*3200, ZOO\*3210)]

#### BIOM\*4050 Biomedical Aspects of Aging F (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 will homeostatic functions associated with bone metabolism and fluid balance.

*Prerequisite(s):* BIOM\*3110 or HK\*3940

#### BIOM\*4090 Pharmacology F (3-0) [0.50]

A lecture and seminar course which will emphasize the actions, uses and toxicities of drugs on various body systems in humans and animals.

*Prerequisite(s):* BIOM\*3090

#### BIOM\*4110 Mammalian Reproductive Biology I F (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 including the brain. Placentation will also be addressed. The impact of the normal biology on social issues will be discussed.

*Prerequisite(s):* (1 of BIOM\*3010, HK\*3402, ZOO\*2090), (BIOM\*3030 or ZOO\*3000), (1 of BIOM\*3110, HK\*3940, ZOO\*3210)

*Restriction(s):* BIOM\*4041/2

#### BIOM\*4120 Mammalian Reproductive Biology II W (2-2) [0.50]

This is a continuation of BIOM\*4110 which examines medically significant aspects of mammalian reproduction in detail. The emphasis will be on pregnancy, parturition and lactation and applications of reproductive technologies and the ethical problems they pose.

*Prerequisite(s):* BIOM\*4110

*Restriction(s):* BIOM\*4041/2

#### BIOM\*4500 Research in Biomedical Sciences I S,F,W (0-6) [0.50]

Independent theoretical and/or practical research of a current topic in any of the biomedical sciences (such as anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Approval of the departmental course coordinator is required before course selection.

*Prerequisite(s):* 14.00 credits

*Restriction(s):* Instructor consent required. Enrolment restricted to Bio-Medical Science majors or Neuroscience minors.

#### BIOM\*4510 Research in Biomedical Sciences II S,F,W (0-12) [1.00]

Independent research of a current topic in any of the biomedical sciences (such as anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Approval of the departmental course coordinator is required.

*Prerequisite(s):* 14.00 credits

*Restriction(s):* BIOM\*4521/2. Instructor consent required. Enrolment restricted to Bio-Medical Science majors or Neuroscience minors.

#### BIOM\*4521 Research in Biomedical Sciences II S,F,W (0-6) [0.50]

First part of the two-semester course BIOM\*4521/2. Refer to BIOM\*4521/2 for course description.

*Prerequisite(s):* 14.00 credits

*Restriction(s):* BIOM\*4510. Instructor consent required. Enrolment restricted to Bio-Medical Science majors or Neuroscience minors.

**BIOM\*4521/2 Research in Biomedical Sciences II S-F,F-W,W-S [1.00]**

Independent research of a current topic in any of the biomedical sciences (such as anatomy, physiology, pharmacology, toxicology, genetics, biochemistry). Approval of the departmental course coordinator is required. This is a two-semester course offered over consecutive semesters. When you select it you must select BIOM\*4521 in the first semester and BIOM\*4522 in the second semester. A grade will not be assigned in BIOM\*4521 until BIOM\*4522 has been completed.

*Prerequisite(s):* 14.00 credits

*Restriction(s):* BIOM\*4510

**BIOM\*4522 Research in Biomedical Sciences II F,W,S (0-6) [0.50]**

Second part of the two-semester course BIOM\*4521/2. Refer to BIOM\*4521/2 for course description.

*Prerequisite(s):* BIOM\*4521

## Botany

*Department of Integrative Biology*

*Department of Molecular and Cellular Biology*

*Additional course listings may be found in the course descriptions for Biology and Plant Biology.*

*Senior students are encouraged to inquire about graduate courses, particularly in the areas of Vascular Plant Systematics and Morphology, that can be taken for credit.*

### **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. (Also offered through distance education format.)

*Restriction(s):* BIOL\*1030, BIOL\*1040

### **BOT\*2000 Plants, Biology and People F (3-1) [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.

*Prerequisite(s):* BIOL\*1040

*Restriction(s):* BOT\*1200

### **BOT\*2030 Plants in the Ontario Landscape F (3-3) [0.50]**

In this course you will learn to identify plants and their habitats in the Ontario landscape. In addition, you will apply methods typically used for field studies in plant biology. Through a series of field exercises, this course will foster an appreciation of local natural areas and provide a foundation for further studies and careers in ecology and environmental assessment.

*Prerequisite(s):* BIOL\*1040

### **BOT\*2050 Plant Ecology F (3-3) [0.50]**

This course supplies the tools needed to assess plant populations and communities quantitatively. Field work is carried out at semi-natural sites on campus to provide practical experience in data collection. These data are analyzed to address conceptual and practical issues raised in lectures. This course is especially valuable for students interested in plant or wildlife biology and in environmental management.

*Prerequisite(s):* BIOL\*1040

### **BOT\*2100 Life Strategies of Plants F,W (3-2) [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):* BIOL\*1040

### **BOT\*3310 Plant Growth and Development W (3-3) [0.50]**

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\*1040

### **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):* BIOL\*1040

### **BOT\*3710 Classification and Morphology of Seed Plants W (3-3) [0.50]**

The interpretation of floral and vegetative morphology for purposes of classification and identification of flowering plants and conifers; flower and cone structure as related to function; principles of plant classification, fundamentals of nomenclature and economic importance of selected plant families are covered. Labs stress interpretation of plant form and plant identification at the ranks of family to species by use of a key to the flora of North-Eastern North America.

*Prerequisite(s):* BOT\*2100

### **BOT\*4380 Metabolism in the Whole Life of Plants W (3-0) [0.50]**

This course follows the developmental changes that take place in plants, and explores the molecular, biochemical and physiological mechanisms that are responsible for development. Emphasis will be placed on the importance of modern experimental methods and critical evaluation of data.

*Prerequisite(s):* BIOL\*1040, BIOC\*2580

## Chemistry

### Department of Chemistry

Credit may be obtained in only 1 of CHEM\*1040, CHEM\*1100; 1 of CHEM\*2400, CHEM\*2480; 1 of CHEM\*2820, CHEM\*2880.

\*A 1 hour tutorial is scheduled in the third hour of the time slot. Laboratory period extends 3 hours.

**Laboratory Deposit:** During the first week of classes, a refundable laboratory deposit of \$10.00 will be collected from each student who registers in any of the courses in Chemistry, designated below by the symbol "+". Breakages will be charged against this deposit.

#### CHEM\*1040 General Chemistry I F,W (3-3) [0.50]

A course which 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):* 1 of 4U Chemistry, OAC Chemistry (or equivalent), CHEM\*1060

*Restriction(s):* CHEM\*1100, CHEM\*1300

#### CHEM\*1050 General Chemistry II S,F,W (3-3) [0.50]

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 or IPS\*1100

*Restriction(s):* CHEM\*1300, CHEM\*1310

#### CHEM\*1060 Introductory Chemistry F (3-0) [0.50]

A course stressing fundamental principles of chemistry, designed for students without 4U or OAC 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 4U or OAC Chemistry in order to proceed to CHEM\*1040 or CHEM\*1300.

#### CHEM\*1100 Chemistry Today F (3-0) [0.50]

A chemistry course for non-scientists. This course 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.

*Restriction(s):* CHEM\*1040, CHEM\*1300

#### CHEM\*1300 Introductory Environmental Chemistry F (3-3) [0.50]

This course presents the fundamentals of chemistry in the context of the environment in the modern industrial world. The core content includes general chemical principles such as stoichiometry, equilibrium and reaction energetics, illustrated with cases and examples that relate these principles to contemporary environmental problems.

*Prerequisite(s):* 1 of 4U Chemistry, OAC Chemistry, CHEM\*1060

*Restriction(s):* CHEM\*1040, CHEM\*1100

#### CHEM\*1310 Introductory Environmental Chemistry II W (3-3) [0.50]

This course extends the foundation of general and physical chemistry for environmental sciences to provide a basis for the understanding of the dynamic behaviour of chemical systems in the external world. The core content includes principles of thermodynamics, photochemistry, electrochemistry and kinetics, illustrated with cases and examples that relate these principles to contemporary environmental problems.

*Prerequisite(s):* CHEM\*1300

*Restriction(s):* CHEM\*1050

#### CHEM\*2060 Structure and Bonding F (3-2) [0.50]

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, MATH\*1210, PHYS\*1010

#### CHEM\*2070 Structure and Spectroscopy S,W (3-2) [0.50]

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

#### CHEM\*2300 Chemical Reactivity F (3-3) [0.50]

A general coverage of the reactivity of the elements and some of their compounds, with an emphasis on the compounds of carbon.

*Prerequisite(s):* CHEM\*1050 or CHEM\*1310

*Restriction(s):* CHEM\*2700

#### CHEM\*2400 Analytical Chemistry I S,F,W (2-6) [0.75]

Quantitative analysis of important inorganic species in solution by volumetric, gravimetric and spectrophotometric techniques. Spreadsheet applications to solution equilibria and data analysis. This course is intended to build the foundations of good analytical laboratory practice.

*Prerequisite(s):* CHEM\*1050 or IPS\*1200

*Restriction(s):* CHEM\*2480

#### CHEM\*2480 Analytical Chemistry I S,F,W (2-3) [0.50]

Same as CHEM\*2400 with a 3 hour laboratory component.

*Prerequisite(s):* 1 of CHEM\*1050, CHEM\*1310, IPS\*1200

*Restriction(s):* CHEM\*2400

#### CHEM\*2700 Organic Chemistry I S,W (3-3) [0.50]

An introduction to organic chemistry, stereochemistry, discussion of the major mechanisms and related reactions: nucleophilic substitution and elimination, electrophilic addition, free radical reactions, electrophilic aromatic substitution, nucleophilic addition and nucleophilic acyl substitution.

*Prerequisite(s):* CHEM\*1050

*Restriction(s):* CHEM\*2300

#### CHEM\*2820 Thermodynamics and Kinetics F (3-3) [0.50]

The laws and applications of chemical thermodynamics and chemical kinetics.

*Prerequisite(s):* CHEM\*1050, (MATH\*1200 or MATH\*2080)

*Restriction(s):* CHEM\*2880

#### CHEM\*2880 Physical Chemistry F (3-2) [0.50]

A survey course for students who are not specializing in chemistry, biochemistry 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 MATH\*1000, MATH\*1080, MATH\*1200)

*Restriction(s):* CHEM\*2820

#### CHEM\*3360 Environmental Chemistry and Toxicology S,W (3-0) [0.50]

The chemistry of the natural environment; the influence of pollutants upon the environment, including methods of introduction of pollutants to, and removal of pollutants from the environment. (Also listed as TOX\*3360.)

*Prerequisite(s):* CHEM\*1050

*Equate(s):* TOX\*3360

*Restriction(s):* CHEM\*1310

#### CHEM\*3430 Analytical Chemistry II: Instrumental Analysis S,W (3-3) [0.50]

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), CHEM\*2070 (may be taken concurrently)

*Restriction(s):* CHEM\*3450, CHEM\*3460, TOX\*3300

#### CHEM\*3440 Analytical Chemistry III: Analytical Instrumentation F (3-3) [0.50]

Analytical Instrumentation, data acquisition, processing and applications in Chemistry and Biochemistry.

*Prerequisite(s):* CHEM\*3430

*Restriction(s):* CHEM\*3450, CHEM\*3460

#### 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

#### 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

<b>CHEM*3750 Organic Chemistry II S,F (3-3) [0.50]</b>
A continuation of the coverage of fundamental aspects of organic chemistry using an assimilation of carbonyl chemistry, unsaturated systems and carbon-carbon bond forming processes to acquaint students with methods of organic synthesis. Topics also include an introduction to spectroscopic methods for the identification of organic compounds. <i>Prerequisite(s):</i> CHEM*2700
<b>CHEM*3760 Organic Chemistry III W (3-3) [0.50]</b>
An in-depth treatment of various aspects of organic chemistry. This will include such topics as the chemistry of heterocycles, bio-organic chemistry, polar rearrangements, organic photochemistry and a detailed discussion of organic spectroscopy. <i>Prerequisite(s):</i> CHEM*2070, CHEM*3750
<b>CHEM*3860 Quantum Chemistry F (3-1) [0.50]</b>
Elementary quantum mechanics for the understanding of the electronic structure of atoms and molecules. <i>Prerequisite(s):</i> CHEM*2070, MATH*2170
<b>CHEM*3870 Symmetry and Spectroscopy W (2-3) [0.50]</b>
Elementary group theory with applications to molecular spectroscopy. (Offered in odd-numbered years.) <i>Prerequisite(s):</i> CHEM*2070
<b>CHEM*4010 Chemistry and Industry W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> (CHEM*2300 or CHEM*2700), (CHEM*3430 or TOX*3300), (MATH*1210 or MATH*2080)
<b>CHEM*4400 Advanced Topics in Analytical Chemistry W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> CHEM*3430 or CHEM*3450
<b>CHEM*4620 Advanced Topics in Inorganic Chemistry F (3-0) [0.50]</b>
A contemporary treatment of subjects of current interest in modern inorganic chemistry. Possible topics include solid state chemistry and organometallic chemistry. <i>Prerequisite(s):</i> CHEM*3650
<b>CHEM*4630 Bioinorganic Chemistry W (3-0) [0.50]</b>
The role and importance of transition metal systems in biological processes. (Offered in odd-numbered years.) <i>Prerequisite(s):</i> BIOC*2580, CHEM*3650 (may be taken concurrently) <i>Co-requisite(s):</i> CHEM*3650
<b>CHEM*4720 Organic Reactivity W (3-0) [0.50]</b>
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. (Offered in even-numbered years.) <i>Prerequisite(s):</i> CHEM*3760 (may be taken concurrently)
<b>CHEM*4730 Synthetic Organic Chemistry F (3-0) [0.50]</b>
Introduction to synthetic organic chemistry, including discussion of retrosynthetic analysis, natural products and organic reactions. The integration of these topics for the rational design of synthetic schemes will also be discussed. <i>Prerequisite(s):</i> CHEM*3760
<b>CHEM*4740 Topics in Bio-Organic Chemistry W (3-0) [0.50]</b>
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 modelling and drug design. <i>Prerequisite(s):</i> BIOC*2580, CHEM*3750
<b>CHEM*4880 Topics in Advanced Physical Chemistry W (3-0) [0.50]</b>
Selected topics in advanced physical chemistry. (Offered in even-numbered years.) <i>Prerequisite(s):</i> (CHEM*2820 or PHYS*3240), (CHEM*3860 or PHYS*3230)

<b>CHEM*4900 Chemistry and Biochemistry Research Project I S,F,W (0-9) [0.75]</b>
Research project and seminar in chemistry and biochemistry. This course is designed to provide senior undergraduates with an opportunity to conduct research in an area of chemistry or biochemistry. 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). 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. <i>Prerequisite(s):</i> 5.00 credits in chemistry or biochemistry including 1.50 credits from BIOC*3570, BIOC*4540, (CHEM*3430 or CHEM*3450 ), CHEM*3640, CHEM*3650, CHEM*3760, CHEM*3870 <i>Restriction(s):</i> Instructor consent required.
<b>CHEM*4910 Chemistry and Biochemistry Research Project II S,F,W (0-9) [0.75]</b>
Research project and seminar in chemistry or biochemistry. Students must make arrangements with both a faculty supervisor and the course coordinator prior to registration. <i>Prerequisite(s):</i> CHEM*4900 <i>Restriction(s):</i> Instructor consent required.

## Classical Studies

### *School of Languages and Literatures*

*Unless otherwise noted, these courses do not require a knowledge of the Greek or Latin languages.*

#### **CLAS\*1000 Introduction to Classical Culture F,W (3-0) [0.50]**

A wide-ranging look at essential features of Greek and of Roman culture and society. Considerable emphasis will be given to the classical views of the human condition.

#### **CLAS\*2000 Classical Mythology W (3-0) [0.50]**

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.

#### **CLAS\*2150 Western Art: Greece F (3-0) [0.50]**

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).

*Equate(s):* ARTH\*2150

#### **CLAS\*2350 The Classical Tradition W (3-0) [0.50]**

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. (Offered in odd-numbered years.)

*Prerequisite(s):* CLAS\*1000 or CLAS\*2000

#### **CLAS\*2360 The Classical Tradition (in Latin) W (6-0) [1.00]**

This course augments CLAS\*2350 for Classical Languages students through the reading and study in Latin of certain primary sources, in particular Cicero, Quintilian, Augustine. (Offered in odd-numbered years.)

*Prerequisite(s):* LAT\*2000

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3000 The Rise and Fall of Athens F (3-0) [0.50]**

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 literature and thought of the period. (Offered in even-numbered years.)

*Prerequisite(s):* 1 of CLAS\*1000, CLAS\*2000, HIST\*2850

#### **CLAS\*3010 The Roman Revolution W (3-0) [0.50]**

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. (Offered in even-numbered years.)

*Prerequisite(s):* 1 of CLAS\*1000, CLAS\*2000, HIST\*2850

#### **CLAS\*3020 History of the Hellenistic World F (3-0) [0.50]**

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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of CLAS\*1000, CLAS\*2000, HIST\*2850

#### **CLAS\*3030 Epic Heroes and Poems W (3-0) [0.50]**

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. (Offered in odd-numbered years.)

*Prerequisite(s):* CLAS\*1000 or CLAS\*2000

#### **CLAS\*3040 Greek Tragedy and Comedy W (3-0) [0.50]**

The nature of tragedy, and the existential and moral questions raised by the plays of Aeschylus, Sophokles, and Euripides. Comedy, fantasy, and society in Aristophanes. (Offered in even-numbered years.)

*Prerequisite(s):* CLAS\*1000 or CLAS\*2000

#### **CLAS\*3050 The Rise and Fall of Athens (in Greek) F (6-0) [1.00]**

This course augments CLAS\*3000 for Classical Languages students through the reading and study in Greek of selected primary sources, such as Herodotus, Thucydides, and Plutarch. (Offered in even-numbered years.)

*Prerequisite(s):* GREK\*2020

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3060 The Roman Revolution (in Latin) W (6-0) [1.00]**

This course augments CLAS\*3010 for Classical Languages students through the reading and study in Latin of selected primary sources, notably Sallust, Cicero, Caesar, and Suetonius. (Offered in even-numbered years.)

*Prerequisite(s):* LAT\*2000

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3070 History of the Hellenistic World (in Greek) F (6-0) [1.00]**

This course augments CLAS\*3020 for Classical Languages students through the reading and study in Greek of selected Greek sources pertaining to the history of the Hellenistic World, primarily Polybius and Plutarch. (Offered in odd-numbered years.)

*Prerequisite(s):* GREK\*2020

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3080 Epic Heroes and Poems (in Greek) W (6-0) [1.00]**

This course augments CLAS\*3030 for Classical Languages students through the reading 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. (Offered in odd-numbered years.)

*Prerequisite(s):* GREK\*2020

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3090 Greek Tragedy and Comedy (in Greek) W (6-0) [1.00]**

This course augments CLAS\*3040 for Classical Languages students through the reading and study in Greek of an extant play. (Offered in even-numbered years.)

*Prerequisite(s):* GREK\*2020

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3100 Religion in Greece and Rome F (3-0) [0.50]**

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. (Offered in even-numbered years.)

*Prerequisite(s):* CLAS\*1000 or CLAS\*2000

#### **CLAS\*3120 Religion in Greece and Rome (in Latin) F (6-0) [1.00]**

This course augments CLAS\*3100 for Classical Languages students through the reading and study of Latin primary sources. (Offered in even-numbered years.)

*Prerequisite(s):* LAT\*2000

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*3150 Space: Roman Art and Urbanism W (3-0) [0.50]**

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). (Offered in even-numbered years.)

*Equate(s):* ARTH\*3150

#### **CLAS\*3200 Sport in Antiquity F (3-0) [0.50]**

The history of sport in Greece and Rome from Homer to the Caesars, with emphasis on its relationship to religion, education, literature, and community life. (Offered in odd-numbered years.)

*Prerequisite(s):* CLAS\*1000, CLAS\*2000

#### **CLAS\*3750 Greek Myth in the Western Tradition F (3-0) [0.50]**

This course will study the functions of Greek myths in the non-Greek cultures which adopted them and so transmitted them to the later general culture of the West. The period to be explored extends from Augustan Rome through the European Middle Ages to the Early Renaissance in Italy. (Offered in even-numbered years.)

*Prerequisite(s):* CLAS\*2000

#### **CLAS\*4000 Novel and Romance in Antiquity F (3-0) [0.50]**

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. (Offered in odd-numbered years.)

*Prerequisite(s):* CLAS\*3030 or CLAS\*3040

#### **CLAS\*4010 Novel and Romance in Antiquity (in Latin) F (6-0) [1.00]**

This course augments CLAS\*4000 for Classical Languages students through the reading and study in Latin of an extant novel. (Offered in odd-numbered years.)

*Prerequisite(s):* LAT\*2000

*Restriction(s):* Registration in Classical Languages.

#### **CLAS\*4150 Research Paper in Classics F,W (3-0) [0.50]**

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.

*Prerequisite(s):* 1.50 credits in Classical Studies courses at the 3000 level

**CLAS\*4400 Seminar in Classics W (3-0) [0.50]**

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.

*Prerequisite(s):* 1.50 credits in Classical Studies at the 3000 level

## Computing and Information Science

### Department of Computing and Information Science

*Note: Credit may be obtained for 1 of CIS\*1000 or CIS\*1200. Students with credit for MCS\*2020 may not register in 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: MCS\*2020, MATH\*1050.*

<b>CIS*1000 Introduction to Computer Applications S,F,W (3-2) [0.50]</b>
A survey of computer systems and software. An introduction to computer programming and data organization. An emphasis on using application packages for personal and business use. The social impact of computing. Not recommended for students with previous computer science background. Cannot be taken for credit by students taking a major or minor in Computing and Information Science.
<i>Restriction(s):</i> CIS*1200, MCS*2020, Not available to students registered in B.A.Sc. Program (Applied Human Nutrition major)
<b>CIS*1200 Introduction to Computing F,W (3-2) [0.50]</b>
An introduction to computer hardware and software, data organization, problem-solving and programming. Exposure to application packages for personal and business use. For students who wish a balance between programming and the use of software packages. Cannot be taken for credit by students taking a major or minor in Computing and Information Science.
<i>Restriction(s):</i> MCS*2020, CIS*1000
<b>CIS*1500 Introduction to Programming F,W (3-2) [0.50]</b>
Introductory 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. For students who require a good understanding of programming or are planning on taking additional specialist Computing and Information Science courses. This is the entry point to all CIS programs. (Also offered in distance education format.)
<i>Restriction(s):</i> CIS*1650
<b>CIS*1900 Discrete Structures in Computer Science W (3-2) [0.50]</b>
Provides a foundation in finite mathematics which is required for further computer science courses. Abstract representation of structures and algorithms. Topics include graph theory, logic, and set theory. (Also offered in distance education format.)
<i>Restriction(s):</i> CIS*1910, CIS*2910
<b>CIS*1910 Discrete Structures in Computing I W (3-2) [0.50]</b>
An introduction to discrete structures and formal methodologies used in computer science, including Boolean, propositional and predicate logic, finite set theory, functions, relations, and proof techniques.
<i>Restriction(s):</i> CIS*1900
<b>CIS*2030 Structure and Application of Microcomputers S,F (3-3) [0.50]</b>
Components of a computer system, including memories, CPU, buses, and input/output subsystems and interface hardware. Instruction sets, addressing modes, assembly/machine language programming. Development of algorithms for data acquisition, display, and process control.
<i>Prerequisite(s):</i> (CIS*1900 or CIS*1910), (CIS*2500 or CIS*2650 )
<b>CIS*2100 Scientific Computing and Applications Development S,F (3-2) [0.50]</b>
This course is intended to introduce the student to techniques in modern applications development using current technologies and practices. The emphasis of the first part of the course ranges from building and maintaining WEB sites to search engines and multimedia presentations. The second part of the course is concerned with building and maintaining simple databases as needed for the management of scientific data. This is done in conjunction with packages for mathematical and statistical analysis, and presentation techniques. Cannot be taken for credit by students taking a major or minor in Computing and Information Science.
<i>Prerequisite(s):</i> 1 of CIS*1000, CIS*1200, CIS*1500
<b>CIS*2430 Object Oriented Programming S,F (3-2) [0.50]</b>
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.
<i>Prerequisite(s):</i> CIS*2500
<b>CIS*2460 Modelling of Computer Systems F (3-2) [0.50]</b>
Discrete simulation based on event queues. Random number generation. How to generate input data, measure and evaluate results using standard statistical tests. Model calibration and validation. Algebraic, probabilistic and simple queuing models of software and hardware operation.
<i>Prerequisite(s):</i> CIS*2500, CIS*2910, (STAT*2040 or STAT*2100 )

<b>CIS*2500 Intermediate Programming W (3-2) [0.50]</b>
How to interpret a program specification and implement it as reliable code. Experience with pointers, complex data types, and important algorithms. Intermediate tools and techniques in problem-solving, programming and program testing.
<i>Prerequisite(s):</i> CIS*1500 <i>Equate(s):</i> CIS*2650
<b>CIS*2520 Data Structures S,F (3-2) [0.50]</b>
Basic data structures: stacks, queues, lists, trees, hashing, search trees, and graphs. Their representation, uses, and algorithms for their traversal and manipulation. The emphasis is on using these structures in implementations and assessing the relative effectiveness of alternative implementations.
<i>Prerequisite(s):</i> (CIS*1910 or CIS*1900), CIS*2500 <i>Co-requisite(s):</i> CIS*2910 <i>Equate(s):</i> CIS*2420
<b>CIS*2750 Software Systems Development and Integration W (3-2) [0.75]</b>
Techniques and tools used in the development of large software systems. Methods for organizing and constructing modular systems, manipulating files, an introduction to interface design, and use of databases. Software tools for managing projects, database connectivity, configuration management, and system application programmer interfaces.
<i>Prerequisite(s):</i> CIS*2430, CIS*2520 <i>Restriction(s):</i> CIS*2450
<b>CIS*2910 Discrete Structures in Computing II S,F (3-2) [0.50]</b>
Introduces graph theory, combinatorics and other discrete structures used in computer science, including graph representations, traversal and simple graph algorithms, trees, counting strategies, summations, and an introduction to finite probability, recursion, and finite state machine models.
<i>Prerequisite(s):</i> CIS*1500, CIS*1910 <i>Restriction(s):</i> CIS*1900
<b>CIS*3110 Operating Systems W (3-1) [0.50]</b>
Operating Systems in theory and practice. Components in a system: scheduling and resource allocation; process management, multi-programming, multi-tasking; I/O control and file systems; mechanisms for client-server computing. Examples from contemporary operating systems.
<i>Prerequisite(s):</i> (CIS*2500 or CIS*2650 ). Recommended (CIS*2030 or ENGG*2410).
<b>CIS*3120 Digital Systems S,W (3-2) [0.50]</b>
Boolean algebra, minimization of Boolean expressions. Design of combinational and sequential logic circuits. Memory design. Control, ALU, bus design. Microprogramming and CPU design.
<i>Prerequisite(s):</i> CIS*2030
<b>CIS*3210 Computer Networks F (3-1) [0.50]</b>
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 covered at only a functional level.
<i>Prerequisite(s):</i> CIS*3110 <i>Restriction(s):</i> CIS*4200
<b>CIS*3460 System Simulation F (3-2) [0.50]</b>
Simulation model classification. Continuous and discrete languages. Process and transaction oriented systems. GPSS: entities, processing logic, chains, queue disciplines. Random number generators. Design and optimization of simulation applications and validation techniques.
<i>Prerequisite(s):</i> ( CIS*2420 or CIS*2520), CIS*3110, STAT*2040
<b>CIS*3490 The Analysis and Design of Computer Algorithms S,W (3-2) [0.50]</b>
The design and analysis of efficient computer algorithms: standard methodologies, asymptotic behaviour, optimality, lower bounds, implementation considerations, graph algorithms, matrix computations (e.g. Strassen's method), NP-completeness.
<i>Prerequisite(s):</i> (CIS*1900 or CIS*2910), ( CIS*2420 or CIS*2520)
<b>CIS*3530 Data Base Systems and Concepts F (3-1) [0.50]</b>
Review of data organization and data management principles with the perspective of analyzing applications suitable for implementation using a DBMS. 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 are expected to demonstrate concepts through project assignments.
<i>Prerequisite(s):</i> ( CIS*2420 or CIS*2520), ( CIS*2450 or CIS*2750)

**CIS\*3620 Programming Language Foundations F (3-1) [0.50]**

This course explores finite automata, formal languages, parsing, sequential machines and models of computation, including an introduction to Turing machines and the hierarchy of machines/languages.

*Prerequisite(s):* ( CIS\*2450 or CIS\*2750), CIS\*3490

*Restriction(s):* CIS\*4600

**CIS\*3700 Introduction to Intelligent Systems W (3-1) [0.50]**

This course covers the core topics of Artificial Intelligence, namely: agents and environment, search, knowledge representation, reasoning, and learning. The last 3 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.

*Prerequisite(s):* ( CIS\*3430 or CIS\*3750), STAT\*2040

*Restriction(s):* CIS\*4750, CIS\*4760

**CIS\*3750 System Analysis and Design in Applications F (3-2) [0.75]**

An introduction to the issues and techniques encountered in the design and construction of software systems. 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.

*Prerequisite(s):* CIS\*2750

*Restriction(s):* CIS\*3430

**CIS\*3760 Software Engineering S,W (3-2) [0.75]**

Examination of the software engineering process and the production of reliable systems. Techniques for the design and development of complex software. Topics include object-oriented analysis, design and modeling, software architectures, software reviews, software quality, software engineering, ethics, maintenance and formal specifications.

*Prerequisite(s):* CIS\*3530, CIS\*3750 (CIS\*3110 recommended)

*Restriction(s):* CIS\*3200

**CIS\*4000 Applications of Computing Seminar F,W (0-6) [0.50]**

This capstone course of the B.Comp. program provides students an opportunity to combine their area of application with their studies in computing via a course project and seminar series. Application areas discussed in any particular semester will depend on areas of application selected by students. Students are required to present their work in a seminar and also to participate in the critical analysis and review of the work of other students taking this course.

*Prerequisite(s):* Registration in semester 7 or higher of the B.Comp. Program and completion of a minimum of 2.50 credits in an Area of Application.

**CIS\*4050 Advanced Computer Architectures F (3-1) [0.50]**

Central processor architectures, control and microprogramming, memory systems, special architectures, underlying support for special architectures, architectures suitable for very large scale integration. (Offered in even-numbered years and may be offered in odd-numbered years.)

*Prerequisite(s):* CIS\*2030, CIS\*3110, CIS\*3120

**CIS\*4210 Telecommunications W (3-1) [0.50]**

This course covers the low-level and the hardware-oriented aspects of computer communications, specifically the physical, link, and network layers. It includes basic telecommunication technology, local area networks, low level protocols, switching technologies, wireless and mobile networking, data and stream compression, and error coding. (Offered in odd-numbered years.)

*Prerequisite(s):* CIS\*3210

*Restriction(s):* CIS\*4200

**CIS\*4300 Human Computer Interaction F (2-2) [0.50]**

Methods for user interface software design, including interface representations and testing. Evaluation and design of sample application systems. Impacts of computer-based information systems on individuals and organizations. Implementation and testing tools. Planning of learning stages and design of assistance subsystems. (Offered in odd-numbered years and may be offered in even-numbered years.)

*Prerequisite(s):* CIS\*3110, ( CIS\*3430 or CIS\*3750)

**CIS\*4400 Distributed Information Systems F (3-2) [0.50]**

This course addresses the basic concepts and methodologies used to build distributed systems applications. The course deals with building information infrastructures involving a base network layer, middleware and application layer. The emphasis is on the enabling methodologies for building complex distributed information systems.

*Prerequisite(s):* (CIS\*3210 or CIS\*4200), ( CIS\*3430 or CIS\*3750), CIS\*3530

**CIS\*4410 Trends in Distributed Systems W (3-1) [0.50]**

A course that examines the technical issues surrounding modern and future distributed commercial enterprises. Special attention is given to new communication modes, high volume, data-intensive systems, distributed transactions and security mechanisms.

*Prerequisite(s):* (CIS\*3210 or CIS\*4200), ( CIS\*3430 or CIS\*3750), CIS\*3530

**CIS\*4430 Information Organization and Retrieval W (3-1) [0.50]**

Advanced techniques for information management. Analysis of advanced indexing structures. Information retrieval, feedback strategies, text searchings, automatic indexing. Database query optimization and system support. Web based retrieval. (Offered in even-numbered years and may be offered in odd-numbered years.)

*Prerequisite(s):* CIS\*3110, CIS\*3530, ( CIS\*3430 or CIS\*3750)

**CIS\*4450 Special Topics in Information Science U (3-1) [0.50]**

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 Department of Computing and Information Science to determine what topic will be offered during specific semesters and which prerequisites, if any, are appropriate.

*Restriction(s):* Instructors consent required.

**CIS\*4500 Special Topics in Computing Science U (3-1) [0.50]**

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 Department of Computing and Information Science to determine what topic will be offered during specific semesters and which prerequisites, if any, are appropriate.

*Restriction(s):* Instructor consent required.

**CIS\*4620 Computability and Complexity W (3-1) [0.50]**

This course explores the theory of computation: Turing machines and variants, computability, NP and NP-completeness, complexity classes, reductions, undecidability and intractability. (Offered in odd-numbered years.)

*Prerequisite(s):* CIS\*3620

*Restriction(s):* CIS\*4600

**CIS\*4650 Compilers W (3-1) [0.50]**

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.

*Prerequisite(s):* (CIS\*2030 or IPS\*2010), CIS\*3110, CIS\*3620

*Restriction(s):* CIS\*3650

**CIS\*4720 Image Processing and Vision W (3-1) [0.50]**

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. (Offered in odd-numbered years.)

*Prerequisite(s):* ( CIS\*2450 or CIS\*2750), CIS\*3110, STAT\*2040 (CIS\*3700 recommended)

*Restriction(s):* CIS\*4760

**CIS\*4730 Pattern Recognition W (3-1) [0.50]**

This course introduces fundamental concepts, theories and algorithms for pattern recognition, which are used in areas including computer vision, signal processing, speech recognition and linguistics. Major themes include statistical pattern classification, supervised and unsupervised learning, feature selection and extraction, clustering, image classification, and syntactical pattern recognition. (Offered in even-numbered years.) (First offering Winter 2008)

*Prerequisite(s):* ( CIS\*2450 or CIS\*2750), CIS\*3110, STAT\*2040 (CIS\*3700 recommended)

*Restriction(s):* CIS\*4760

**CIS\*4760 Computer Vision and Pattern Recognition W (3-0) [0.50]**

Image enhancement, image smoothing, thresholding, segmentation, region growing, decision-theoretical methods, information theory, neural networks, syntactic/structural methods, applications. Computer graphic experience desirable. Offered in odd-numbered years and may be offered in even-numbered years. (Last offering Winter 2006.)

*Prerequisite(s):* ( CIS\*2450 or CIS\*2750), CIS\*3110, STAT\*2040

**CIS\*4770 Topics in Artificial Intelligence F (3-1) [0.50]**

This course explores selected topics in Artificial Intelligence at an intermediate level. Topics will be chosen to acquaint students with important aspects of Artificial Intelligence having the greatest current interest. (Offered in even-numbered years.)

*Prerequisite(s):* CIS\*3700

*Restriction(s):* CIS\*4750

**CIS\*4780 Computational Intelligence F (3-1) [0.50]**

This course introduces concepts of soft computing: modelling uncertainty, granular computing, neurocomputing, evolutionary computing, probabilistic computing and soft computing for software engineering. (Offered in odd-numbered years.) (First offering Fall 2007.)

*Prerequisite(s):* ( CIS\*3430 or CIS\*3750), CIS\*3490, STAT\*2040 (CIS\*3700 recommended)

*Restriction(s):* CIS\*4750

**CIS\*4800 Computer Graphics W (3-1) [0.50]**

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. (Offered in even-numbered years.)

*Prerequisite(s):* CIS\*3110, ( CIS\*3430 or CIS\*3750)

**CIS\*4820 Game Programming W (3-1) [0.50]**

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. (Offered in odd-numbered years.)

*Prerequisite(s):* CIS\*3110, ( CIS\*3430 or CIS\*3750)

**CIS\*4900 Computer Science Project S,F,W (0-6) [0.50]**

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 with expertise in the area.

*Prerequisite(s):* 2 CIS courses at the 4000 level

*Restriction(s):* Instructor consent required.

**CIS\*4910 Computer Science Thesis S,F,W (0-6) [0.50]**

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.

*Prerequisite(s):* CIS\*4900

*Restriction(s):* Instructor consent required.

## Co-operative Education

### *Co-operative Education Services*

*COOP\*XXXX courses are limited to students registered in a co-operative education program.*

#### **COOP\*1000 Co-op Work Term I F,W,S (3-0) [0.00]**

This is a semester long experience in a paid work setting. Co-op work semesters differ depending on the program and major. Location of the semester is varied. Refer to program of study for the semester in which this is scheduled. Students must obtain a passing grade in order to continue in the Co-op Program.

*Prerequisite(s):* COOP\*1100

#### **COOP\*1100 Introduction to Co-operative Education F,W (3-0) [0.00]**

This course will introduce students to the theory and practice of co-operative education at the University of Guelph. Students will learn to take full advantage of the co-op option. They will acquire practice in the skills required to succeed in the competitive process of securing suitable work terms. Specifically, the course will cover: characteristics and expectations of the "new" world of work, interview skills, resume and cover letter writing, as well as general skills required to be successful in the co-op program. Students also obtain practice in the co-op employment process.

*Restriction(s):* Enrolment in a co-operative education program

#### **COOP\*2000 Co-op Work Term II F,W,S (3-0) [0.00]**

This is a semester long experience in a paid work setting. Co-op work semesters differ depending on the program and major. Location of the semester is varied. Refer to program of study for the semester in which this is scheduled. Students must obtain a passing grade in order to continue in the Co-op Program.

*Prerequisite(s):* Completion of previous co-op work requirements in COOP\*1000

#### **COOP\*3000 Co-op Work Term III F,W,S (3-0) [0.00]**

This is a semester long experience in a work setting. Co-op work semesters differ depending on the program and major. Location of the semester is varied. Refer to program of study for the semester in which this is scheduled. Students must obtain a passing grade in order to continue in the Co-op Program.

*Prerequisite(s):* Completion of previous co-op work requirements in COOP\*2000

#### **COOP\*4000 Co-op Work Term IV F,W,S (3-0) [0.00]**

This is a semester long experience in a work setting. Co-op work semesters differ depending on the program and major. Location of the semester is varied. Refer to program of study for the semester in which this is scheduled. Students must obtain a passing grade in order to continue in the Co-op Program.

*Prerequisite(s):* Completion of previous co-op work requirements in COOP\*3000

#### **COOP\*5000 Co-op Work Term V F,W,S (3-0) [0.00]**

This is a semester long experience in a work setting. Co-op work semester differ depending on the program and the major. Location of the semester is varied. Refer to program of study for the semester in which this is scheduled. Students must obtain a passing grade in order to continue in the Co-op program.

*Prerequisite(s):* Completion of previous co-op work requirements in COOP\*4000

## Crop Science

### Department of Plant Agriculture

#### **CROP\*2050 Gateway to Organic Agriculture F (3-3) [0.50]**

Students taking this course will be exposed to the full spectrum of opportunities in the field of organic agriculture, from social policy and marketing to crop rotation and rare breeds. In addition to lectures provided by faculty from several departments, guest speakers will offer practical insights into the field. Experiential learning will be encouraged, through data collection and analysis from organically managed land and from site interviews with practitioners in the field.

*Prerequisite(s):* 5.00 credits

*Restriction(s):* CROP\*3400

#### **CROP\*2110 Crop Ecology W (3-0) [0.50]**

Fundamental ecological principles are applied to managed agricultural ecosystems. Crop selection and management are viewed as influencing interactions among species and the environment. Adaptation and distribution of temperate zone crops are related to both environmental constraints and human intervention.

*Prerequisite(s):* BIOL\*1040

#### **CROP\*2280 Crops in Land Reclamation F (2-2) [0.50]**

The use of vegetation to reclaim land disturbed by human intervention, including mining and extraction, construction of right-of-ways, waste disposal, and logging, are introduced. Fundamentals of soil, plant, and associated microbial relations are reviewed, with emphasis on plant adaptation to soil constraints. Presentations by guest speakers and visits to nearby sites are used to identify the off as well as on-site environmental implications of land disturbance.

#### **CROP\*3130 Tutorials in Organic Agriculture II W (3-2) [0.50]**

Building on the introductory exposure offered in CROP\*2050, this course will rely on small group mentoring to stimulate independent, learner-centered analysis of selected topics in organic agriculture. Students will participate in an interdisciplinary analysis of case study topics offered in the form of two, 6-week modules in biophysical and social areas, including organic certification, non-chemical pest management, organics in an international context, and enhancing soil and crop health. The goal is to encourage holistic, systematic thinking in students learning to become self-directed analysts and decision-makers. Seminar periods will support both guest speakers and student presentations.

*Prerequisite(s):* CROP\*2050

#### **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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of AGR\*2451/2 , AGR\*2470, CROP\*2110

#### **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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of AGR\*2451/2 , AGR\*2470, CROP\*2110

#### **CROP\*3340 Managed Grasslands W (3-2) [0.50]**

Managed forage grasses and legumes provide grazing, 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 production and environmental management. Species will be distinguished morphologically and physiologically, focusing on adaptation to climatic, edaphic, and managerial constraints. Topics will include: physiological attributes of forage species, sward lifespan, establishment and maintenance practices, forage quality indices and harvest management. (Offered in even-numbered years.)

*Prerequisite(s):* 1 of AGR\*2451/2 , AGR\*2470, CROP\*2110

#### **CROP\*4220 Cropping Systems W (3-2) [0.50]**

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):* (2 of CROP\*3300, CROP\*3310, CROP\*3320 , CROP\*3330 ), (SOIL\*3080 or SOIL\*4090)

#### **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\*2451/2 or AGR\*2470

#### **CROP\*4260 Crop Science Field Trip F (0-4) [0.50]**

A field study designed to increase the student's knowledge of agricultural production and agri-business. Students will tour a selected area of North America prior to the fall semester, visiting cash crop and livestock farms, supporting industries (e.g. processing, manufacturing) and markets (e.g. elevators, stockyards). A fee of approximately \$750.00 per student will be assessed.

*Prerequisite(s):* 12.50 credits including AGR\*2451/2 or AGR\*2470

*Restriction(s):* Instructor consent required.

#### **CROP\*4340 Seminar: Selected Topics in Crop Science F (2-0) [0.50]**

This course is designed to permit students to study topics of current interest in the production of crops for feed and food purposes. Students will present seminars and prepare video presentations on the selected topics.

*Prerequisite(s):* 0.50 credits at the 3000 level in Crop Science

## Economics

### Department of Economics

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. (Also offered through distance education format.)

*Prerequisite(s):* ECON\*1200

#### ECON\*1100 Introductory Macroeconomics S,F,W (3-0) [0.50]

The Canadian economy: aggregate performance and policy; an analysis of the determinants of national income, employment and the price level, the role of government monetary and fiscal policies in improving the rate of economic growth. (Also offered through distance education format.)

*Prerequisite(s):* ECON\*1050

#### ECON\*2000 Contemporary Economic Problems in Canada W (3-0) [0.50]

A study of important socio-economic issues in Canada using the basic principles of macro and microeconomics. Discussion and analysis of population, poverty, foreign ownership, regional development, etc.

*Prerequisite(s):* ECON\*1050, ECON\*1100

#### ECON\*2100 Economic Growth and Environmental Quality F (3-0) [0.50]

An examination of the implications of economic growth on the quality of the environment, employing the basic principles of economic analysis. (Also offered through distance education format.)

*Prerequisite(s):* ECON\*1050

#### ECON\*2200 Industrial Relations F (3-0) [0.50]

This is a survey course of the Canadian industrial relations system. Among the topics covered are: the growth and objectives of unions, the legal framework of collective bargaining, the effects of unions on industry and the economy, industrial conflict and public policies.

*Prerequisite(s):* ECON\*1050

#### ECON\*2310 Intermediate Microeconomics S,F,W (3-1) [0.50]

The analysis of the behaviour of households and firms under alternative assumptions and market conditions. (Also offered through distance education format.)

*Prerequisite(s):* ECON\*1050, (AGR\*1101/2 or ECON\*1100)

#### ECON\*2410 Intermediate Macroeconomics S,F,W (3-1) [0.50]

The analysis of closed economy models of aggregate spending, output, employment, prices and interest rates under alternative assumptions about the nature of labour, product and financial markets. The analysis of theories of consumption, investment and money demand. (Also offered through distance education format.)

*Prerequisite(s):* ECON\*1050, ECON\*1100

#### ECON\*2420 Canadian Economic History U (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)

#### ECON\*2500 Introduction to the Economics of Law, Crime and Enforcement U (3-0) [0.50]

An introduction to the economic analysis of law, participation in illegal labour and product markets and optimal law enforcement. Topics covered may include the economics of property, contract and tort law, the costs of crime and crime control, measurement of deterrence, regulatory enforcement, trade-offs in the likelihood and severity of punishment and tax evasion.

*Prerequisite(s):* ECON\*1050

#### ECON\*2650 Introductory Development Economics F (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 analyse 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

#### ECON\*2720 Business History F (3-0) [0.50]

This course surveys the evolution of economic activity and organization from the industrial revolution to the present. Particular attention is given to the changing relationship between technology and business organization, the shift from proprietorship to corporation 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)

#### ECON\*2740 Economic Statistics F,W (3-1) [0.50]

A course designed to prepare students conceptually and mathematically for ECON\*3560, 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 of 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\*1050, ECON\*1100, (1 of MATH\*1000, MATH\*1050, MATH\*1080, MATH\*1200)

#### ECON\*2770 Introductory Mathematical Economics F,W (3-1) [0.50]

This course applies the elements of calculus and matrix algebra to simple microeconomic and macroeconomic problems.

*Prerequisite(s):* ECON\*1050, ECON\*1100, (1 of MATH\*1000, MATH\*1080, MATH\*1200)

#### ECON\*3100 Game Theory W (3-1) [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 finally analyzing the game to predict the behaviour of the economic agents.

*Prerequisite(s):* ECON\*2310, ECON\*2410, ECON\*2770

*Restriction(s):* ECON\*3770

#### ECON\*3200 Economics of Industrial Relations U (3-0) [0.50]

An economic analysis of the Canadian industrial relations system. Emphasis is placed on understanding the theoretical implications of unions and collective bargaining practices for wage and employment outcomes. Empirical analysis of the nature and growth of unions and of their effect on industrial conflicts, public policy and the performance of the economy.

*Prerequisite(s):* ECON\*2310

#### 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, ECON\*2740

#### ECON\*3460 Introduction to Finance F (3-0) [0.50]

This course examines some important principles of the theory of finance which underlie investment (capital budgeting) and associated financing decisions of financial managers. These decisions are necessarily interdependent and typically carried out under conditions of uncertainty regarding the future values of key economic variables, for example, cash flows. Problems, illustrations and short case studies are used to demonstrate how finance theory can be applied and assist financial managers to make optimal decisions. (Not open to B.Comm. MEIF or MEIF:C students.)

*Prerequisite(s):* ECON\*1050, ECON\*1100, (1 of ECON\*2740, PSYC\*2010, STAT\*2060, STAT\*2080)

*Restriction(s):* For B.Comm. students only. But, B.Comm.(MEIF) not allowed to take this course.

#### ECON\*3500 Urban Economics U (3-0) [0.50]

This course is designed to apply the basic principles of intermediate economic theory to problems facing urban areas with emphasis on Canada. Topics to be covered will include such things as housing, urban poverty, municipal financing, transportation.

*Prerequisite(s):* ECON\*2310

<b>ECON*3510 Money, Credit and the Financial System U (3-0) [0.50]</b>
Economics of the payments system, banking and other financial institutions and of credit markets. Bank of Canada operations and policy instruments. Monetary theory and policy. <i>Prerequisite(s):</i> ECON*2310, ECON*2410
<b>ECON*3520 Labour Economics U (3-0) [0.50]</b>
A study of the labour market, wage determination and the relationship between wages, employment, and prices. <i>Prerequisite(s):</i> ECON*2310
<b>ECON*3530 Industrial Organization U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*2310, ECON*2770
<b>ECON*3560 Theory of Finance F (3-0) [0.50]</b>
Capital budgeting and long-term finance and investment decisions by firms and individuals. Introduction to capital asset pricing under uncertainty and to concept of efficient markets. Major emphasis is on corporate finance. (Also offered through distance education format.) <i>Prerequisite(s):</i> ECON*2310, (1 of ECON*2740, PSYC*2010, STAT*2040, STAT*2050, STAT*2060, STAT*2080, STAT*2090, STAT*2100, STAT*2120)
<b>ECON*3580 Economics of Regulation U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*2310
<b>ECON*3600 Macroeconomics in an Open Economy W (3-0) [0.50]</b>
International macroeconomic issues; the balance of payments; models of exchange rate determination; foreign exchange risk and covered interest arbitrage; alternative exchange rate regimes; small versus large economies; monetary and fiscal policy in an open economy. <i>Prerequisite(s):</i> ECON*2410, ECON*2740, ECON*2770
<b>ECON*3610 Public Economics U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*2310
<b>ECON*3620 International Trade U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*2310
<b>ECON*3660 Economics of Equity Markets U (3-0) [0.50]</b>
This course studies the economic literature regarding the determination of security prices and the operation of the stock market. (Also offered through distance education format.) <i>Prerequisite(s):</i> ECON*3560
<b>ECON*3710 Advanced Microeconomics S,F (3-1) [0.50]</b>
An in-depth treatment of consumer and producer theory leading to the general equilibrium model of the economy and the study of welfare economics. <i>Prerequisite(s):</i> ECON*2310, ECON*2770. A grade average of 70% or more in these courses is recommended.
<b>ECON*3720 History of the World Economy Since 1850 U (3-0) [0.50]</b>
Study of the evolution of the world economy since 1850. Topics may include the costs and benefits of empire to Britain, Anglo-German trade rivalry, the rise to prominence of "settler colonies", economic growth in the Third World, reparations and war debt, agricultural overproduction, origins of the Great Depression, the 1945-1973 boom in world production and trade. <i>Prerequisite(s):</i> ECON*1050, ECON*1100, (1 of ECON*2310, EURO*2070, HIST*2450, HUMN*2070, IDEV*2010)

<b>ECON*3730 Europe and the World Economy to 1914 U (3-0) [0.50]</b>
This course surveys the world economy with a particular focus on the industrial revolution in Europe, demographic change, the rise to prominence of the 'settler colonies', the origins of international inequality and the experience of globalization during the later nineteenth century. Particular attention is given to international trade, capital flows and migration. <i>Prerequisite(s):</i> ECON*1050, ECON*1100, (1 of ECON*2310, EURO*2070, HIST*2450, HUMN*2070, IDEV*2010)
<b>ECON*3740 Introduction to Econometrics F,W (3-1) [0.50]</b>
A computer-based course involving 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. <i>Prerequisite(s):</i> ECON*2310, ECON*2410, ECON*2740, ECON*2770
<b>ECON*4400 Economics of Organizations and Corporate Governance U (3-0) [0.50]</b>
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. (Offered through Distance Education only.) <i>Prerequisite(s):</i> ECON*2310 Students must have completed a minimum of 12 credits.
<b>ECON*4500 Topics in Urban Economics U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*3710, ECON*3740
<b>ECON*4560 Advanced Topics in Finance U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*3560, ECON*3710, (ECON*3100 or ECON*3770)
<b>ECON*4640 Applied Econometrics I F (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*3740 <i>Equate(s):</i> ECON*4740
<b>ECON*4710 Advanced Topics in Microeconomics F (3-0) [0.50]</b>
An intensive study of the scope, methodology, and content of contemporary microeconomics; selected topics in partial and general equilibrium analysis. <i>Prerequisite(s):</i> ECON*3710
<b>ECON*4720 Topics in Economic History U (3-0) [0.50]</b>
The use of economic theory to analyse the process of historical economic change. <i>Prerequisite(s):</i> 12.50 credits including ECON*2310
<b>ECON*4750 Topics in Public Economics U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> ECON*3710

**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.

*Prerequisite(s):* ECON\*3600, ECON\*3710, ECON\*3740

**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. 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\*3710, ECON\*3740, (ECON\*3100 or ECON\*3770 )

**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.

*Prerequisite(s):* ECON\*3710, ECON\*3740

**ECON\*4800 Theory of Strategic Management 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. ECON\*4800 may not be counted as a 4000 level economics course for purposes of satisfying the minimum 4000 level economics course requirements in the B.A. Honours Economics or B.A. Management Economics programs.

*Prerequisite(s):* AGE\*3320, ECON\*2740. Completion of semester 5.

**ECON\*4810 Advanced Macroeconomic Theory W (3-0) [0.50]**

The theory of complex aggregate economic models; their assumptions, construction, and use in the analysis of macroeconomic activity.

*Prerequisite(s):* ECON\*3600, ECON\*3740

**ECON\*4830 Economic Development U (3-0) [0.50]**

A study of the theories, problems and policies of economic growth with special reference to underdeveloped countries.

*Prerequisite(s):* ECON\*2310

**ECON\*4840 Applied Econometrics II W (3-0) [0.50]**

This is a continuation of ECON\*4640 and deals with 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. There will be applications to data using statistical software.

*Prerequisite(s):* ECON\*4640

**ECON\*4860 Seminar in Current Economic Problems U (3-0) [0.50]**

Examination in a seminar setting of selected contemporary economic problems.

*Prerequisite(s):* ECON\*3600, ECON\*3710, ECON\*3740, or instructor consent

**ECON\*4870 Mathematical Economics: Dynamics F (3-0) [0.50]**

The purpose of this course is to introduce the student to the techniques and application of dynamic analysis. The discussion concentrates on systems of differential equations, optimal control theory, etc.

*Prerequisite(s):* ECON\*3600, ECON\*3710

**ECON\*4880 Topics in International Economics U (3-0) [0.50]**

Selected topics involving the advanced analysis of the causes and effects of trade and financial flows and international factor movements.

*Prerequisite(s):* ECON\*3600, ECON\*3710, or instructor consent

**ECON\*4890 History of Economic Thought U (3-0) [0.50]**

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.

*Prerequisite(s):* ECON\*2310, ECON\*2410

**ECON\*4900 Special Study in Economics S,F,W (3-0) [0.50]**

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. One only of ECON\*4900/ECON\*4910 may count as one of the required minimum number of 4000 level economics courses in the B.A. programs.

*Prerequisite(s):* ECON\*3600, ECON\*3710, ECON\*3740

**ECON\*4910 Special Study in Economics S,F,W (3-0) [0.50]**

Same description as for ECON\*4900.

**ECON\*4930 Environmental Economics U (3-0) [0.50]**

An advanced treatment of the interrelationship between economic activities and the state of the natural environment from the economists' point of view.

*Prerequisite(s):* ECON\*2410, ECON\*3710

**ECON\*4940 Model Building and Economic Analysis U (3-0) [0.50]**

Progress in economic theory is increasingly made by studying the properties of small artificial economies or competitive general equilibrium models. This course examines the construction of competitive general equilibrium models and outlines the computational techniques required to solve them. These models may be used to study a range of subject areas, including topics in macroeconomics with a particular emphasis on business cycle analysis or the economics of the environment. The subject areas will vary from year to year and are chosen at the instructor's discretion.

*Prerequisite(s):* ECON\*3740

**ECON\*4950 Applied Economics Research Project W (3-0) [0.50]**

Students plan, develop and conduct a research project under individual faculty supervision and structured co-ordination. The supervisor is a faculty member with expertise in the area being investigated. The co-ordinator is a faculty member who leads group sessions on research project objectives, expectations, potential topics, data sources, available software and other relevant issues. Students will also present proposals, progress reports and final products in this group setting.

*Restriction(s):* Students registered in the B.A. Applied Economics program. Students must have completed 17.0 credits.

## Engineering

### School of Engineering

*Students who are not registered in the B.Sc.(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 B.Sc. (Eng.) Degree program. All other students will require a waiver form to be signed by the B.Sc.(Eng.) Program Counsellor.*

#### ENGG\*1100 Engineering and Design I F (2-4) [0.75]

Introduction to engineering and design by means of selected problems. Students integrate basic science, mathematics, and complementary studies to develop and communicate engineering solutions to specific needs using graphical, oral, and written means. Application of computer-aided drafting, spreadsheets, and other tools to simple engineering design problems. The practice of professional engineering and the role of ethics in engineering.

*Restriction(s):* Registration in the Engineering Program

#### ENGG\*1210 Engineering Mechanics I W (3-1) [0.50]

Fundamental principles of Newtonian mechanics; statics of particles in 2-D space; equilibrium of rigid bodies in 2-D; distributed forces; friction, linear and angular momentum of rigid bodies; conservation of energy; principles of impulse and momentum; and, plane motion of rigid bodies.

#### ENGG\*1500 Engineering Analysis W (3-1) [0.50]

Engineering applications of Matrix algebra, vector spaces and computer techniques to solve linear systems. Linear transformations, eigenvalues and eigenvectors, diagonalization and their applications in engineering problems. Complex variable algebra, multi-variables functions, partial derivatives, and maxima and minima.

*Co-requisite(s):* ENGG\*1210, MATH\*1210

*Restriction(s):* MATH\*2150

#### ENGG\*2100 Engineering and Design II F (2-4) [0.75]

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, structured programming and database management software. An introduction to safety in engineering practice and design. An introduction to the concept of sustainable development.

*Prerequisite(s):* ENGG\*1100, ENGG\*1210, ENGG\*1500, MATH\*1200, PHYS\*1130

#### ENGG\*2120 Material Science F (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

#### 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

#### ENGG\*2230 Fluid Mechanics W (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

#### 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 stimulate and analyse such systems.

*Prerequisite(s):* ENGG\*1210, ENGG\*1500, MATH\*1200, MATH\*1210, PHYS\*1130

*Co-requisite(s):* MATH\*2270

#### ENGG\*2410 Digital Systems Design Using Descriptive Languages F (3-2) [0.50]

Review of Boolean algebra, 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), CIS\*1900, PHYS\*1130

#### ENGG\*2450 Network Theory W (3-1) [0.50]

Electrical quantities; electrical circuit elements and their characteristics; exponentials, sinusoids and phasors applied to electrical circuits; s-plane representation and pole-zero concepts; steady-state a.c. circuits; general network analysis; magnetic quantities and circuits; demonstration of principles as applied in several engineering fields.

*Prerequisite(s):* ENGG\*2400, PHYS\*1130

#### 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):* (CHEM\*1040 or CHEM\*1310), GEOG\*2000

#### 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

#### ENGG\*2660 Biological Engineering Systems I W (3-1) [0.50]

Mathematical description and identification of biological systems; through mass and energy balances; reactions in biological systems; biomedical, food, and bio-processing applications.

*Prerequisite(s):* ENGG\*2400, MATH\*2270, MICR\*1020

*Co-requisite(s):* BIOC\*2580

#### 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 B.Sc.(Eng.) program, ENGG\*2100, ENGG\*2230, ENGG\*2400, ENGG\*3260 and, for the specific majors: BIOE, ( ENGG\*2150 or ENGG\*2160), ENGG\*2660; ESC, ENGG\*3390; ENVE, (ENGG\*3180 or ENGG\*3360 ), ENGG\*3590, ENGG\*3650; WRE, ENGG\*3590, ENGG\*3650

*Restriction(s):* Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses.

#### ENGG\*3150 Engineering Biomechanics W (3-2) [0.50]

Basic concepts of biological material structure, properties, adaptation and remodeling; viscoelasticity in biological materials and techniques for modeling viscoelastic material behaviour; 2-dimensional and 3-dimensional joint kinematic analysis techniques; muscle mechanics and optimization techniques; current techniques in laboratory instrumentation and biomedical applications.

*Prerequisite(s):* ENGG\*2160

*Restriction(s):* ENGG\*2150

#### 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

**ENGG\*3170 Biomaterials F (3-2) [0.50]**

Physical properties of natural and synthetic (e.g. stainless steel, polymers) materials used in biological engineering applications. 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

**ENGG\*3180 Air Quality F (3-2) [0.50]**

The study of the transport, transformation and deposition processes associated with air pollutants. The chemical and biological nature, impacts, and sources of air pollutants. The physical aspects of the atmospheric boundary layer. The mathematical treatment of diffusion in a homogeneous field in a boundary layer. Regulatory approaches worldwide and their use of air quality modeling. The use of models for the design of stacks and monitoring networks.

*Prerequisite(s):* ENGG\*2230, (ENGG\*2560 or ENGG\*2660)

*Co-requisite(s):* ENGG\*3260

*Restriction(s):* ENGG\*3360

**ENGG\*3240 Engineering Economics F (3-0) [0.50]**

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.

*Prerequisite(s):* ENGG\*2400, ENGG\*2450, MATH\*1210, MATH\*2270

*Restriction(s):* Registration in the Engineering program.

**ENGG\*3260 Thermodynamics F (3-1) [0.50]**

Macroscopic thermodynamics and its applications to engineering analysis and design. First and second laws and applications to closed and flow systems, both with and without reaction; properties of pure substances and solutions; introduction to phase and reaction equilibrium. Applications include gas-vapour systems (psychrometrics and beyond), power and refrigeration cycles, Raoult and Henry law solution behaviours, flame temperature calculations, semiconductor device fabrication.

*Prerequisite(s):* CHEM\*1040, ENGG\*2230, ENGG\*2400, ENGG\*2450, MATH\*2270

**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)

**ENGG\*3380 Computerized Organization and Design F (3-2) [0.50]**

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

**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

**ENGG\*3410 Systems and Control Theory W (3-2) [0.50]**

Modeling, performance analysis and control with potential application to engineering, physical and biological systems. Topics include modeling in time, Laplace and frequency domains. Performance and stability by methods of Hurwitz, Routh, Bode, and Nyquist. Control by ON/OFF and PID Controllers.

*Prerequisite(s):* ENGG\*2400, MATH\*2270

*Co-requisite(s):* ENGG\*2450

**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

**ENGG\*3450 Electrical Devices F (3-2) [0.50]**

Semiconductors materials, Silicon, Germanium and other semi-conductors' material, Doping and effects of extrinsic material introduction, Conduction in metals and semi-conductors, electrical and thermal characteristics of diodes and transistors; principles of modern electronic devices and their applications in circuits; diodes; bipolar and field effect transistors; circuit integration; operational amplifiers; logic gates.

*Prerequisite(s):* ENGG\*2450

**ENGG\*3470 Mass Transfer Operations W (3-2) [0.50]**

Application of mass transfer principles in the natural and engineered systems. Mass transport in the multi-media fate of contaminants in and between air, water and land. Design and analysis of separation processes for emission and pollutant prevention.

*Prerequisite(s):* ENGG\*2230, ENGG\*3260, MATH\*2270

*Co-requisite(s):* ENGG\*3430

**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, control engineering, and computer science. The course emphasizes the integration of these areas through the design process employing the two skills of (1) modeling, analysis, control design, and computer simulation of dynamic systems, and (2) experimental validation of models, analysis and the understanding of the key issues of hardware implementation. The two skills are developed through assignments emphasizing analytical analysis with complementary laboratory exercises. The material covered includes mechatronic system design; a review of kinematics, electronics, modeling, simulation, signals and control; control architectures; sensors including vision; and actuators.

*Prerequisite(s):* ENGG\*3450

*Co-requisite(s):* ENGG\*3410

*Restriction(s):* ENGG\*3400

**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, (BIOL\*1040 or MICR\*1020), STAT\*2120

**ENGG\*3640 Microcomputer Interfacing F (3-2) [0.50]**

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

*Co-requisite(s):* ENGG\*3390

*Restriction(s):* ENGG\*4640

**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

**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

**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

**ENGG\*4110 Biological Engineering Design IV F,W (2-6) [1.00]**

Capstone design project in the Biological Engineering program. Teams 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. Teams produce reports and a poster presentation to a professional standard. Ethics and law case studies relevant to professional engineering practice are discussed.

*Prerequisite(s):* All 1000 and 2000 level core credits, ENGG\*3100.

*Restriction(s):* Registration in semester 8 (last semester) of the B.Sc.(Eng.) program and in a max. of 3.25 credits registration. Student must have a minimum cumulative average above 60% in ALL ENGG courses. Instructor consent required.

**ENGG\*4120 Engineering Systems and Computing Design IV F,W (2-6) [1.00]**

Capstone design project in the Engineering Systems and Computing program. Teams 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. Teams produce reports and a poster presentation to professional standard. Ethics and law case studies relevant to professional engineering practice are discussed.

*Prerequisite(s):* All 1000 and 2000 level core credits, ENGG\*3100.

*Restriction(s):* Registration in semester 8 (last semester) of the B.Sc.(Eng.) program and in a max. of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Instructor consent required.

**ENGG\*4130 Environmental Engineering Design IV F,W (2-6) [1.00]**

Capstone design project in the Environmental Engineering program. Teams 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. Teams produce reports and a poster presentation to professional standard. Ethics and law case studies relevant to professional engineering practice are discussed.

*Prerequisite(s):* All 1000 and 2000 level core credits, ENGG\*3100.

*Restriction(s):* Registration in semester 8 (last semester) of the B.Sc.(Eng.) program and in a max. of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Instructor consent required.

**ENGG\*4150 Water Resources Engineering Design IV F,W (2-6) [1.00]**

Capstone design project in the Water Resources Engineering program. Teams 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. Teams produce reports and a poster presentation to professional standard. Ethics and law case studies relevant to professional engineering practice are discussed.

*Prerequisite(s):* All 1000 and 2000 level core credits, ENGG\*3100.

*Restriction(s):* Registration in semester 8 (last semester) of the B.Sc.(Eng.) program and in a max. of 3.25 credits registration. Students must have a minimum cumulative average of 60% or higher in ALL ENGG courses. Instructor consent required.

**ENGG\*4250 Watershed Systems Design F (3-2) [0.75]**

Hydrological analysis of watershed systems including stream flow for design of structures and channels, flood warning, flood plain mapping, low-flow characteristics. Hydraulic analysis applied to design of dams, reservoirs, control structures, energy dissipation structures, bridges and culverts. Analysis of steady flow profiles, flood waves, and sediment transport, for 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

**ENGG\*4260 Water and Wastewater Treatment Design W (3-2) [0.75]**

Application of design principles for a variety of water purification systems, including drinking water, municipal wastewater, industrial wastewater and agricultural wastewater. This involves the design of physical, chemical and biological 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 occupational health and safety for the workers and the public.

*Prerequisite(s):* ENGG\*3100, ENGG\*3590

**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

**ENGG\*4300 Food Processing Engineering Design F (3-2) [0.75]**

Formulation of mathematical models to describe food processing operations and the response of foods to such operations. Process evaluation, development and computer-aided design of operations such as thermal processes and food freezing. The influence of water activity and structure on the enzymatic, cellular, organic and structural systems of foods. The properties of powders and particulate foods and mechanical operations with solid foods.

*Prerequisite(s):* ENGG\*3260, ENGG\*3830

**ENGG\*4330 Air Pollution Control F (3-2) [0.75]**

Analysis and design of atmospheric pollution control techniques. Techniques considered include both in-process solutions as well as conventional end-of-pipe treatments. Pollutants covered include gaseous, particulate, metals and trace organics.

*Prerequisite(s):* ENGG\*3180, ENGG\*3260

**ENGG\*4340 Solid and Hazardous Waste Management F (3-2) [0.50]**

Solid waste generation rates and waste composition. Integrated waste management: collection, recovery, reuse, recycling, energy-from-waste, and landfilling. Biological treatment of the organic waste fraction - direct land application, composting, anaerobic digestion. Environmental impact of waste management and sustainable development. Cross media issues related to solid waste disposal. An introduction to hazardous waste management and treatment methods.

*Prerequisite(s):* ENGG\*2560 or ENGG\*2660

**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 system for rural land. Design of sprinkler and trickle irrigation systems.

*Prerequisite(s):* ENGG\*2230, ENGG\*3650, ENGG\*3670

**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 pipe 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

**ENGG\*4380 Bioreactor Design F (3-2) [0.75]**

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

**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

**ENGG\*4400 Biomechanical Engineering Design F (3-2) [0.75]**

Concept development, design, modeling, manufacture and testing of medical implants and tools. This course will investigate the biomechanical factors influencing design, regulatory issues, current development trends, and the possible future of medical implant technology.

*Prerequisite(s):* ENGG\*2120, ENGG\*3170

**ENGG\*4420 Real-time Systems Design F (3-3) [0.75]**

Hard versus soft real-time systems. Real-time issues in computer architecture. Clocks and timing issues. Correctness and predictability. Structuring and describing real-time software. Clock Synchronization. Real-time objects and atomicity. Validation of timing constraints. Formal Real-time systems design and analysis techniques: process-based, event-based, and Petri Nets. Resource management and control. Real-time scheduling and task allocation (Uni-processor and Multi-processor). Design for dependability, reliability and fault tolerance. Real-time programming using ADA. Survey of Real-time operating systems. Scenarios of real-time systems.

*Prerequisite(s):* CIS\*3110

**ENGG\*4430 Neuro-Fuzzy and Soft Computing Systems W (3-0) [0.50]**

Introduction to Fuzzy systems; Fuzzy Sets; Fuzzy Rules and Fuzzy Reasoning; Fuzzy Inference Systems; Fuzzy Control; Introduction to Neural and Automata Networks; Neural Network Paradigms; Supervised Learning Neural Networks, Learning from Reinforcement, Unsupervised Learning and Other Neural Networks; Neurocontrol; System Identification; Controller Training, Robust Neurocontrol; Adaptive Neuro-Fuzzy Inference Systems, Coactive Neuro-Fuzzy Modeling; Reinforcement Learning Control, Gradient-Free Optimization, Feedback Linearization and Sliding Control; Applications: Quality Assurance, Decision Aid Systems, Automatic Character Recognition, Inverse Kinematics Problems, Automobile MPG (Miles Per Gallon) Prediction, System Identification, Channel Equalization, Adaptive Noise Cancellation, Process Control.

*Prerequisite(s):* ENGG\*3410

*Co-requisite(s):* ENGG\*4280

**ENGG\*4450 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

**ENGG\*4460 Robotic Systems 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

**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

## English

### School of English and Theatre Studies

1. ENGL\*1080 and ENGL\*2080 provide a strong foundation for English studies at the University level and are required courses particularly 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 **two** 4000-level seminars, 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\*1080 Literatures in English I: Reading the Past F,W (3-0) [0.50]

This 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. Reading-and writing-intensive course.

*Equate(s):* ENGL\*1060

#### ENGL\*1200 Reading the Contemporary World F,W (3-0) [0.50]

This course 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 specializing in English must take ENGL\*1080 but may also take ENGL\*1200. (Also offered in distance education format.)

#### ENGL\*1410 Major English Writers U (3-0) [0.50]

This course offers an introduction to the study of literature through a chronological consideration of works by selected major authors from the Middle Ages to the 20th century, in relation to their social, intellectual and literary backgrounds. Instruction and practice in effective essay writing will be included. (Offered through Distance Education only.)

#### 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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of DRMA\*1000, ENGL\*1080, ENGL\*1200

#### ENGL\*2080 Literature in English II: Finding a Critical Voice F,W (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.

*Prerequisite(s):* ENGL\*1080

*Equate(s):* ENGL\*2060

#### 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

#### 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

#### ENGL\*2190 Representation and Sexuality W (3-0) [0.50]

This variable-content course offers a historically grounded introduction to the critical study of sexuality and representation in literature and related media. The course may engage with a specific time-period or genre, or it may concentrate directly on the problem of theorizing sexual difference in relation to other literary and cultural forces.

*Prerequisite(s):* 1 of ENGL\*1080, ENGL\*1200, ENGL\*1410, WMST\*1000

#### ENGL\*2200 Postcolonial Literatures F (3-0) [0.50]

This course introduces significant issues, perspectives, and voices within the study of the postcolonial literatures in English. The course may include literature from Africa, Australia, Canada, the Caribbean, India and the Pacific. Reading-intensive course.

*Prerequisite(s):* ENGL\*1080 or ENGL\*1200

#### ENGL\*2230 Popular Genres F (3-0) [0.50]

This variable-content course introduces students to the focused study of a selected popular genre of literature, film, or other related media. The course explores the emergence and development of the popular genre chosen for that semester's study, such as science fiction, detective fiction, romance, the western, film noir, or the fairy tale; diverse critical approaches to the genre; and some meanings of the term "popular". Reading-intensive course.

*Prerequisite(s):* 1 of ENGL\*1080, ENGL\*1200, ENGL\*1410

#### ENGL\*2550 North American Native Literatures W (3-0) [0.50]

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.

*Prerequisite(s):* ENGL\*1080 or ENGL\*1200

#### ENGL\*2640 Culture, Location, Identity: Minoritized Literatures in Canada and Beyond F (3-0) [0.50]

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. (Also offered in distance education format.)

*Prerequisite(s):* ENGL\*1080 or ENGL\*1200

#### ENGL\*2740 Children's Literature F,W (3-0) [0.50]

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.

*Prerequisite(s):* 1 of ENGL\*1080, ENGL\*1200, ENGL\*1410

#### ENGL\*2880 Women in Literature W (3-0) [0.50]

This variable-content course will involve the study and discussion of poems, stories, novels and plays by or about women. Reading-intensive course.

*Prerequisite(s):* 1 of ENGL\*1080, ENGL\*1200, ENGL\*1410, WMST\*1000

**ENGL\*2920 Creative Writing: Fiction U (3-0) [0.50]**

An introduction to creative writing through practical experiment, discussion, and the technical examination of models. Since admission to the course depends on the approval of the instructor, students must submit examples of their work to the instructor prior to registration. This course will be offered annually in either Fall or Winter. Check with the School.

*Prerequisite(s):* ENGL\*1080 or ENGL\*1200

*Restriction(s):* Instructor consent required.

**ENGL\*2940 Creative Writing: Poetry U (3-0) [0.50]**

As for ENGL\*2920. (Note especially that students must submit examples of their work to the instructor prior to registration.) This course will be offered annually in either Fall or Winter. Check with the School.

*Prerequisite(s):* ENGL\*1080 or ENGL\*1200

*Restriction(s):* Instructor consent required.

**ENGL\*3020 Shakespearean Contexts F (3-0) [0.50]**

A study of a selection of Shakespeare's plays and poems in conjunction with a wide range of other texts. These may include, at the instructor's choice, 'source' narratives, subsequent adaptations, and plays and poems by predecessors or contemporaries, as well as other writings that shed light upon discursive contexts, performance practices, authorial and playhouse revision, issues of gender and subjectivity, and the reception of these plays by early modern audiences and readers. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English or (THST\*2010, THST\*2120)

**ENGL\*3040 U.S. Latina/o Literature F (3-0) [0.50]**

This course focuses on an English-language literature of a particular Latina/o community (e.g. Chicana/os, Cuban Americans, Puerto Ricans) in the United States. Students will be introduced to theoretical approaches and a wide range of genres, including narrative fiction, autobiography, literary journalism, and poetry. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* (1 of DRMA\*1000, ENGL\*1080, ENGL\*1200), ENGL\*2040

**ENGL\*3080 History of the English Language W (3-0) [0.50]**

This course introduces the key historical developments of the English language and the primary tools for the study of language. Topics to be discussed may include: the origins of and precursors to the English language; the phonology, lexicon, and grammar of English; the persistence of language change; the historical factors that affect language change; the origins and implications of language variety; the formation of prestige dialects; and the current state of the English language in Canada and the world. Reading-intensive course. (Offered in even numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3120 Shakespearean Receptions F (3-0) [0.50]**

The course will examine a selection of Shakespeare's plays and poems in the light of contemporary reassessments of his place in the canon. For purposes of comparison, plays by contemporaries of Shakespeare may also be studied along with adaptations of Shakespeare chosen from a number of different historical contexts. Close readings of these texts will be organized around such topics as Shakespearean adaptations, constructions of gender and subjectivity, Shakespeare and canon-formation, Shakespeare and critical theory, the politics of Shakespearean interpretation, Shakespeare in contemporary media culture, and changing performance practices. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English or (THST\*2010, THST\*2120)

**ENGL\*3170 Elizabethan Literary Culture: Chastity and Power W (3-0) [0.50]**

This course examines the literary culture associated with Elizabeth I. Issues, including gender and sexuality, power, and religion, will be explored through a wide range of sixteenth- and early-seventeenth century poems (these will be chosen from such writers as Skelton, Wyatt, Surrey, Mary Stuart, the Sidneys, Spenser, Marlowe, Shakespeare, Raleigh, Aemilia Lanyer, Mary Wroth, Elizabeth I, Jonson, Donne, and Herbert). Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3180 Colonial Encounters: Nation and Discovery W (3-0) [0.50]**

This course examines writings concerning, or alluding to, English (and other European) encounters with new worlds and different cultures. These will include accounts of travel, conquest, and colonization written or collected by such writers as Bernal Diaz, Luis de Camoës, Columbus, Hakluyt, Raleigh, Harriot, Drake, and Bradford; essays by writers such as Las Casas, Spenser, and Montaigne; and plays, poems, and prose such as Marlowe's Tamburlaine, Shakespeare's The Tempest, Jonson, Chapman, and Marston's Eastward Ho, parts of Spenser's Faerie Queene, Marvell's "Bermudas", and Behn's Oronooko: or the Royal Slave. Key intertexts to these writings will also be studied, along with relevant aspects of postcolonial theory. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3190 Poetics and Politics in Early Modern England F (3-0) [0.50]**

This course examines the intimate connections between poetics and politics in Elizabethan and Jacobean literature. The texts to be studied may include plays and poems, as well as essays, political, historical, and theological writings, and works of prose fiction. Close readings of these texts will focus on such issues as kingship, transgression, rhetoric, and the relation between political subjection and literary subjectivity. The course will establish connections between early modern notions of power and its manipulation, and contemporary critical and political discourses in which similar issues are at stake. A wide range of materials chosen from such authors as More, Ascham, Castiglione, Montaigne, Ariosto, Sidney, Puttenham, James I., Nash, Fennor, Bacon, Lyly, Marston, Greene, and Lodge will be examined by way of close readings. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3220 Representing Britain: 18th- & 19th- Century Literature F (3-0) [0.50]**

This course explores selected topics in the interrelation of literature and politics from the late seventeenth to the nineteenth century in Britain. Areas of focus may include: the literature of civil war, constitutionalism and revolution; satire and society; writings emerging from suffrage reform and agitation, the colonization of Ireland, the construction of political subjectivity, political paranoia, conspiracy and sedition. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3230 Literary Culture and the English Civil War W (3-0) [0.50]**

This course will examine key literary figures and texts in the period leading up to and including the English Civil War (1623-1660). Literary contributions to the political and religious struggles of the period will be studied in the light of a range of different approaches. Primary readings will be selected from among the works of such writers as Milton, Marvell, Charles I, Hobbes, Coppe, Winstanly, Everard, Katherine Philips, Jonson, Webster, Middleton, and Massinger. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3260 Writing Gender & Family: 18th- and 19th- Century Literature W (3-0) [0.50]**

This course will explore texts which engage with such matters as the shifting constructions of the family, changing sexual practices, ideals of femininity and masculinity, and the significance of the separation of spheres in eighteenth- and nineteenth-century writing. Focal points may include: the role of desire in narrative; literary representations of gender and economics, of gender and medicine, and of pivotal figures such as the prostitute, the governess, the rake, or the gentleman. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3280 Early English Literature U (3-0) [0.50]**

This course will focus on the language, literature, and culture of Anglo-Saxon England (7th to 11th centuries). In addition to acquiring the rudiments of Old English and engaging in translation exercises with short passages from Anglo-Saxon texts, students will read a selection of texts in modern English translation; these will include Beowulf, the Battle of Maldon, elegies such as the Seafarer, riddling poems and religious poems. In reading these texts, which may be supplemented with intertexts from other northern European cultures, students will be encouraged to reflect on such issues as the processes by which early English culture affiliated itself to Judaeo-Christian and Hellenic traditions. Reading-intensive course. (Offered in alternate years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3300 Restoration to Romanticism: Forging the Nation F (3-0) [0.50]**

Drawing upon a range of literary texts from a variety of genres, this course will explore the politics of language and style in a series of cultural debates that shaped British national character from the late seventeenth to the late eighteenth centuries. Selected topics may include: literary representations of religious establishment and dissent; the division of power; the question of minority cultures; revolution and reaction; the problem of economic stability. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3320 Romanticism to Victorianism: Culture and Conformity F (3-0) [0.50]**

This course explores the key texts in various genres of British cultural debates of the late eighteenth to the late nineteenth century. Focal points may include: literary representations of family and society; science and narrative; Britain's "others"; class and conflict; protest and power; the roots of modernism; European influences. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3340 British Imperial Culture F (3-0) [0.50]**

This multi-genre course introduces students to the literature of British imperialism in the eighteenth and nineteenth centuries. The course will consider the changing relationship between nation, empire, and colony by examining literary representations of such topics as: orientalism; travel writing; the construction of race; the representation of trade; the popular literature of empire; children's literature; the question of the other. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3360 Scottish Formations F (3-0) [0.50]**

This variable content course explores selected issues, ideas and periods of this national literature, including influences on immigrant and world literature. Topics may include: mythologizing the Celt; Scottish writers and English critics; sovereignty and nationhood; "new wave" writing; Scottish influences on the Canadian canon; witches, devils, and folk tales. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3370 Narrative Modes: 18th- and 19th-Century Literature W (3-0) [0.50]**

This course offers comparative study of narrative structures, which includes selections from such genres as poetry, fiction, biography, autobiography and specialized discourses. Focal points may include romance; the gothic; the novel of sensibility; the realist novel; sensation fiction; the discourses of medicine and science. Reading intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3380 Studies in the History of Literary Production W (3-0) [0.50]**

This course will examine a range of issues arising from the materiality of book production and circulation. Topics may include serialization; mass production and circulation; patronage; reviewing; circulating libraries; licensing; censorship; children's literature; periodicals; gift books; letters; and other aspects of publishing and the public sphere. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3420 Contemporary Drama W (3-0) [0.50]**

British, American and European drama from the Second World War to the present day. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English or (THST\*2010, THST\*2120)

**ENGL\*3450 Early Twentieth-Century Drama F (3-0) [0.50]**

A study of post-realist developments in modern drama including symbolism, expressionism, surrealism, and epic theatre. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English or (THST\*2010, THST\*2120)

**ENGL\*3460 Literature in London W (2-3) [0.50]**

A study of British literature in its social and historical context. Reading of particular works will be supplemented by visits to sites of literary interest, the use of special library and museum collections, and attendance at public lectures and performances. For London Semester students only.

*Prerequisite(s):* Admission to the London Semester.

**ENGL\*3470 Twentieth-Century British Literature I W (3-0) [0.50]**

This multigenre course explores aesthetic and socio-cultural movements (including modernism) in British literature from the turn of the century to mid-century. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3480 Twentieth-Century British Literature II F (3-0) [0.50]**

This multigenre course explores aesthetic and socio-cultural movements (including postmodernism) in British literature from mid-century to the present. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3540 Writing the United States: Forging the Nation F (3-0) [0.50]**

This multigenre course explores the relationship between literary production and political power from the emergence of American culture in the seventeenth century to the fragmentation of the United States around the time of the Civil War in the mid-nineteenth century. Areas of focus may include national fantasy; the literature of revolution and federation; narratives of slavery, captivity, and native genocide; immigration and travel literature; the literature of reform, abolition, and the cult of domesticity. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3550 Modern United States Literatures W (3-0) [0.50]**

This multigenre course explores powerful examples of twentieth-century 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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3560 Emergent Literary Forms W (3-0) [0.50]**

This course will introduce students to a range of medieval writing practices including manuscript culture, oral culture, early drama, literatures in translation, early lyric, and so forth. Its focus will be on the transition from oral to written literatures by way of emergent literary forms in English and other languages. The texts to be studied will be chosen from a corpus that includes the following: Monmouth's History of the Kings of Britain, the Lais of Marie de France, Chretien de Troyes, Layamon's Brut, the Mabinogion, Harald's Saga, the Chanson de Roland, extracts from saints' lives, miracle stories, play cycles, and others. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3570 Studies in the Age of Chaucer F (3-0) [0.50]**

This course will introduce students to significant aspects of Chaucerian literature while also introducing a range of other writings by Chaucer's precursors and near contemporaries chosen from a range of writers that include the following: the Gawain poet, Malory, Wyclif, Lydgate, Langland, Dunbar, Henryson, Margery Kemp, Julian of Norwich, Christine de Pisan, Dante, Petrarch, and Boccaccio. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3630 Writing Canada: Forging the Nation W (3-0) [0.50]**

This multigenre 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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3660 Canadian Poetry W (3-0) [0.50]**

This course is an introductory study of Canadian poetry, in a variety of national and international contexts. Reading-intensive course. (Offered in even-number years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3670 Twentieth-Century Canadian Literature and Criticism F (3-0) [0.50]**

This multigenre course examines formations of, and resistances to, ideas of national consciousness and cultural identity in Canadian literature and criticism in English from the beginnings of the twentieth century to the 1960s. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3680 Twentieth-Century Canadian Literature and Criticism F (3-0) [0.50]**

This course examines the role of narrative in Canadian literature and criticism in English, since the 1960s, in relation to a variety of social, cultural, and historical contexts. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**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. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3740 United States Imperial Culture F (3-0) [0.50]**

This multigenre course will introduce students to a period of intense cultural struggle in the United States, from Civil to First World War (i.e. from the mid-nineteenth to early-twentieth centuries). Topics for consideration may include the literary representation of race, civil war, and empire; machine and mass culture; emergent literatures and changing constituencies of American citizenship. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3750 Studies in Postcolonial Literatures W (3-0) [0.50]**

Concentrated study in a major sub-area of postcolonial literature. Specific topics will vary each year, but may involve focus on a particular genre or region such as Africa, Australia, Canada, the Caribbean, India, and the Pacific. Reading-intensive course. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3760 The Atlantic Diaspora: Colonialism, Resistance, Literatures W (3-0) [0.50]**

This course examines literatures in English in the Atlantic colonies (selected from among Canada, the Caribbean, the United States, and Latin America) in the context of movements of peoples and cultures from Africa, Europe, and India across the Atlantic Ocean. Discussion will focus on eighteenth- and nineteenth-century texts addressing such issues as cross-cultural contacts with indigenous peoples, the slave trade and abolition movements, and the kinds of culture developing in these evolving societies. 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, the evolution of national and racial stereotypes, and religious syncretism. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3820 Study in a Major Author W (3-0) [0.50]**

This variable-content course provides an intensive study of works by a single writer. Reading-intensive course. (Offered in even-numbered years.)

*Prerequisite(s):* 1.00 credits in English.

**ENGL\*3860 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.

**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.

*Prerequisite(s):* 1.00 credits in English.

**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.

**ENGL\*3940 Seminar: Form, Genre, and Literary Value F,W (3-0) [0.50]**

This seminar focuses on textual conventions such 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

**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

**ENGL\*4040 Seminar: Medieval and Early Modern Literatures U (3-0) [0.50]**

This seminar provides the opportunity for intensive study of British literature from the beginnings to 1660.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4050 Seminar: 18th- and 19th-Century Literatures U (3-0) [0.50]**

This seminar provides the opportunity for intensive study of British literature from 1660 to 1900.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4070 Seminar: United States Literatures U (3-0) [0.50]**

This seminar provides the opportunity for intensive study of American literature.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4080 Canadian Literatures U (3-0) [0.50]**

This seminar provides the opportunity for intensive study of Canadian literature.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4100 Special Studies in English U (3-0) [0.50]**

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)

**ENGL\*4110 Special Studies in English U (3-0) [0.50]**

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)

**ENGL\*4200 Postcolonial Literatures U (3-0) [0.50]**

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.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4210 Modern and Contemporary Literatures U (3-0) [0.50]**

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-century writings in English.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4220 Special Topics in Women's Writings U (3-0) [0.50]**

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.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4300 Non-fiction Prose U (3-0) [0.50]**

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)

**ENGL\*4680 Seminar: 20th-Century Poetry U (3-0) [0.50]**

Studies in English-language modern and contemporary poetry.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

**ENGL\*4690 Contemporary Literary Theory W (3-0) [0.50]**

The study of 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)

**ENGL\*4720 Creative Writing: Prose/Poetry U (3-0) [0.50]**

A development and extension of the creative writing/reading skills and techniques introduced in ENGL\*2920 and ENGL\*2940. 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. Admission to the course is normally dependent on the successful completion of ENGL\*2920 or ENGL\*2940 and, following the submission of a portfolio of new work, the approval of the instructor.

*Prerequisite(s):* ENGL\*2920 or ENGL\*2940

*Restriction(s):* Instructor consent required.

**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.

**ENGL\*4910 Honours English Essay S,F,W (3-0) [0.50]**

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.

*Prerequisite(s):* ENGL\*2080, (ENGL\*2120 or ENGL\*2130), (ENGL\*3940 or ENGL\*3960)

*Restriction(s):* Instructor consent required.

## Environmental Biology

*Department of Environmental Biology*

*Additional course listings may be found in the course descriptions for Microbiology, Plant Biology, Toxicology and Zoology.*

### ENVB\*1010 Food Crop Pest Management W (2-2) [0.50]

The biology and control of insects, diseases, nematodes and weeds of field horticultural crops are studied. Pest control concepts including diagnosis and the biology of the pests, problem solving and the impact pest control products have on the environment with consideration to the safe use and storage or pesticides will be thoroughly examined. Non-chemical methods of pest control are also examined.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVB\*2010 Food Production and the Environment W (3-0) [0.50]

Systems of food production are described and related to their impact on the environment and food safety. Consumer demands and the effects of food processing and packaging will be discussed. Issues of population pressure and sustainable development will be explored. For non-B.Sc.(Agr.) students.

*Prerequisite(s):* 2.50 credits

*Restriction(s):* AGR\*1250. Not available to students in registered in B.Sc. (Agr.)

### ENVB\*2030 Current Issues in Forest Science F (3-0) [0.50]

Basic principles of forestry and forest management with emphasis on Canada's forests. Relationship of important tree species to their preferred environments. Aspects of tree growth, forest ecology and soils and silviculture. Utilization of forests and trees in the global context.

*Prerequisite(s):* BIOL\*1040

### ENVB\*2040 Plant Health and the Environment W (3-0) [0.50]

This is an interdisciplinary course on the nature and importance of diseases, weeds, 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

### ENVB\*2100 Problem-Solving in Environmental Biology F,W (2-2) [0.50]

An introduction to current issues and problems in environmental biology. Methodologies of addressing environmental issues and concerns will be critically examined. Project design, information retrieval and organization, and the interpretation of statistical data will be covered. Oral and written presentations, both individual and group will be emphasized.

*Prerequisite(s):* BIOL\*1040, (CHEM\*1050 or CHEM\*1310), MATH\*1080

### ENVB\*2210 Introductory Apiculture 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.

### ENVB\*3000 Nature Interpretation F,W (2-3) [0.50]

An exploration of communication and experiential learning theories and their application to natural history interpretation and environmental education program design. Students will develop and present interpretive materials and a program within the context of the existing nature interpretation program at The Arboretum. (Also offered through distance education format.)

*Prerequisite(s):* 1 of BIOL\*2060, BOT\*2050, BIOL\*3110

### ENVB\*3010 Climate Change Biology 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.

*Prerequisite(s):* BIOL\*1040, (1 of BIOL\*2060, BIOL\*3110, BOT\*2050), (CHEM\*1050 or CHEM\*1310)

### ENVB\*3030 Pesticides and the Environment W (3-2) [0.50]

The role and use of pesticides by various facets of society and the effect of these pesticides on biological activities in the environment. A research proposal is required.

*Prerequisite(s):* BIOL\*1040, (CHEM\*1040 or CHEM\*2300)

### ENVB\*3040 Natural Chemicals in the Environment F,W (3-0) [0.50]

The role of naturally occurring chemical substances in the inter-relationships of organisms, population dynamics and the structure of ecosystems, and the role of such chemicals in the biological regulation and control of pests. (Also offered through distance education format.)

*Prerequisite(s):* BIOL\*1040

### ENVB\*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

### ENVB\*3210 Plant Pathology F (2-3) [0.50]

The nature of disease in plants and a study of the basic principles of control. A collection of 30 plant disease specimens is required.

*Prerequisite(s):* BIOL\*1040

### ENVB\*3250 Forest Health and Disease F (2-2) [0.50]

The impact of beneficial and pathogenic micro-organisms 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):* ENVB\*2030 or BOT\*2100

### ENVB\*3300 Applied Ecology and Environment F (2-2) [0.50]

Environmental issues require scientific analysis. The applications of ecology, the science of diversity, abundance, and activities of living things and their interactions with the physical and biotic environment, are presented as the basis for sustainable agricultural practices, ecosystem rehabilitation, and conservation. Use of ecological principles in planning and policy are debated in local, regional, national, and global contexts.

*Prerequisite(s):* 1 of BIOL\*2060, CROP\*2110, (BIOL\*3110, BIOL\*3120)

### ENVB\*3330 Ecosystem Processes and Applications W (3-0) [0.50]

An ecosystem approach that treats living organisms and physical elements of the environment as components of a single, integrated system is introduced in this course. The important processes that characterize ecosystems, tracing water, carbon and nutrients from their abiotic sources to their cycles through plants, animals and decomposers will be examined. Human activity is a dominant influence on these cycles and this influence is surveyed in several highly impacted ecosystems.

*Prerequisite(s):* BIOL\*1040, (1 of BIOL\*2060, BIOL\*3110, BOT\*2050), (CHEM\*1050 or CHEM\*1310)

### ENVB\*4020 Water Quality and Environmental Management F (3-3) [0.50]

This course will introduce the student to issues pertaining to water quality, how to assess environmental impacts, and strategies for the management of water resources. Examples and case studies will draw from agricultural, industrial and municipal sources. Topics include: historical perspectives, methods to assess water quality, restoration and rehabilitation of impacted aquatic habitats, and risk assessment and management of water resources.

*Prerequisite(s):* BIOL\*3450

### ENVB\*4040 Behaviour of Insects W (3-0) [0.50]

Investigation of the behaviour of insects within an ecological and evolutionary framework. Topics range from basic behavioral principles to the complex behaviour exhibited by the social insects.

*Prerequisite(s):* 1 of BIOL\*3110, ENVB\*3090, ZOO\*4380, ZOO\*4400

### ENVB\*4070 Biological and Cultural Control of Plant Diseases W (3-0) [0.50]

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 BIOL\*3050, ENVB\*3210, MICR\*3220

### ENVB\*4100 Applied Entomology W (3-3) [0.50]

A study of the life histories and pest management practices employed against insect pests of various plant and animal hosts. Principles of economic entomology are illustrated using specific insect pests as examples.

*Prerequisite(s):* 1 of ENVB\*3090, 0.50 credits in Crop Production at the 3000 level

### ENVB\*4130 Chemical Ecology: Principles & Practice W (3-0) [0.50]

Chemicals mediate interactions between individuals of a species and between organisms and their host plants. These interactions can be manipulated and exploited to manage pest populations through the use of pheromones, allelochemicals and host plant resistance. The nature of these interactions (from behavioural to evolutionary), biological and chemical methods used in their investigation, and the application of chemical ecology to insect pest and plant disease management will be covered.

*Prerequisite(s):* ENVB\*3040

**ENVB\*4220 Biology of Aquatic Insects F (2-3) [0.50]**

A study of the adult and immature forms of aquatic insects. Students are required to present a collection of at least 200 insects.

*Prerequisite(s):* ENVB\*3090

**ENVB\*4240 Biological Activity of Pesticides W (3-0) [0.50]**

A study of the fate and mode of action of pesticides, e.g., insecticides, herbicides and fungicides.

*Prerequisite(s):* 0.50 credits in biochemistry

**ENVB\*4260 Field Entomology F (1-6) [0.50]**

An introduction to insect sampling, observation, and experimentation in field situations. Lectures and discussions on the biology of the insect fauna of the field site. Students conduct two projects (individual or small group): (1) a diversity study involving the observation, collection and identification of selected groups of insects and (2) a behaviour/ecology study utilizing experimental techniques to test hypotheses. Student evaluation based on participation in course activities and written reports. Course fees cover the costs of room, board, equipment, and transportation to the field station. Detailed information is available from the Office of the Chair - Department of Environmental Biology. This course must be recorded as part of your Fall course selection and tuition and compulsory fees will be calculated accordingly.

*Prerequisite(s):* 1.00 or more credits in biological sciences, ENVB\*3090

**ENVB\*4270 Insect Biosystematics W (2-3) [0.50]**

A study of the lesser known groups of native insects and an introduction to taxonomic procedure and the principles of insect systematics. Students are required to assemble their own insect collections prior to registering in this course. The laboratory portion of the course will focus on identification of student insect collections.

*Prerequisite(s):* ENVB\*3090

**ENVB\*4290 Applied Insect Physiology F (2-3) [0.50]**

This course examines major physiological systems of insects at the molecular, cellular and whole animal levels of organization. Emphasis is placed on identification of potential physiological targets for insecticides, and molecular mechanisms of insecticide resistance. Applications of analytical chemistry, electrophysiology, mathematical modeling and molecular biology to the study of insect physiology are discussed. The course includes tutorial exercises examining the external and internal morphology of representative insect species.

*Prerequisite(s):* STAT\*2040, (1 of ENVB\*3030, ENVB\*3040, ENVB\*3090, TOX\*2000, ZOO\*3200)

**ENVB\*4420 Problems in Environmental Biology S,F,W (0-6) [0.50]**

Students will select a research problem in an area of special interest. Direction will be given by a faculty member concerned with entomology-apiculture, applied microbiology, weed science and environmental physiology, plant pathology, etc., as represented within the department. For 7th and 8th semester students considering graduate studies.

*Prerequisite(s):* 1.50 credits at the 3000 level in the agricultural and biological sciences

*Restriction(s):* Instructor consent required.

**ENVB\*4550 Ecotoxicological Risk Characterization W (3-0) [0.50]**

A biologically based, advanced course that will give students working knowledge of current processes and techniques for ecotoxicological risk characterization. The course material will cover the topics of problem definition, dose response characterization, exposure characterization, risk assessment, and risk management decision making. (Also listed as TOX\*4550.)

*Prerequisite(s):* ENVB\*3030, TOX\*2000

*Equate(s):* TOX\*4550

**ENVB\*4780 Forest Ecology F,W (2-3) [0.50]**

Principles of forest ecology with 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. (Also offered through distance education format.)

*Prerequisite(s):* ENVB\*2030, (1 of BOT\*2050, BIOL\*2060, BIOL\*3110)

**ENVB\*4800 Topics in Applied Biology F (2-2) [0.50]**

An integrated overview of those areas of applied biology that are of special interest to environmentalists. The material will be directed toward students majoring in Environmental Biology and Environmental Protection. Lectures and discussions will be presented by faculty and other professionals from research, business, education and technical fields. Students will conduct seminars on selected topics.

*Prerequisite(s):* 1.50 credits at the 3000 level in the agricultural or biological sciences

*Restriction(s):* Restricted to B.Sc. (Environmental Biology major) or B.Sc. (Env.) (Environmental Protection major. )

## Environmental Design and Rural Development

### *School of Environmental Design and Rural Planning*

#### **EDRD\*1150 Landscape Design W (2-3) [0.50]**

This course is an introduction to the design of the built landscape environment, with an emphasis on graphic communication skills, creativity, and the design process. Basic drawing and drafting techniques along with the principles and styles of design, landscape materials and structures, and the incorporation of plant materials will be covered.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **EDRD\*2050 Landscape Construction and Planning F (1-4) [0.50]**

Students will be engaged in the creation of landscape structures, including plan reading and estimating. Practical skills and experience will be obtained through real-life and simulated projects, using actual materials and design scenarios taken from industry examples. Technical and professional guidance will enable students to undertake typical landscape structure layout, estimates, and installation, based on design plans and specifications. (First offering is Fall 2007)

*Prerequisite(s):* EDRD\*1150

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **EDRD\*3400 Sustainable Rural 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):* AGR\*1250 or 10.00 credits

*Restriction(s):* AGR\*3400

#### **EDRD\*3450 Watershed Planning Practice S,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. (Offered through distance education format only.)

*Prerequisite(s):* 10.00 credits or instructor consent

*Equate(s):* UNIV\*3400

#### **EDRD\*3500 Recreation and Tourism Planning W (0-0) [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. (Offered through Distance Education only.)

*Prerequisite(s):* 10.00 credits or permission of the instructor

*Equate(s):* UNIV\*3500

#### **EDRD\*3550 Economic Development for Rural and Smaller Communities S,W (0-0) [0.50]**

This course addresses the variety of challenges facing rural and smaller communities in Canada relating to livelihood creation and maintenance, employment, investment, business development, tax base maintenance and enhancement and the associated strategies for development planning and management. The roles of various agents (public, private, community, Third Sector) are addressed through the literature and case studies. The course critically examines "local" and "community" economic development, and reviews the rich Canadian experience here. The structure and dynamics of rural economies are examined. The course addresses selected methods of analysis and outlines the process of planning for, and managing, economic development at the local level. Various development organizations (e.g. cooperatives, Community Development Corporations) are examined. (Offered through Distance Education only.)

*Equate(s):* UNIV\*3550

#### **EDRD\*4010 Tourism Planning in the Less Developed World F,W (0-0) [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. (Offered through Distance Education only.)

*Prerequisite(s):* 5 credits

#### **EDRD\*4500 Planning Industrial Ecology S,F (0-0) [0.50]**

To create ecologically informed and professionally skilled scientists, engineers, planners, and managers by providing them with: systems-analytic frameworks to critically examine processes, products, infrastructure, management systems and public policies from the perspective of environmental sustainability; and the skill set to guide the design of appropriate responses. Course requires a science background, minimum OAC Chemistry or Physics. (Offered through Distance Education only.)

*Prerequisite(s):* 10.00 credits or equivalent

*Equate(s):* UNIV\*4500

## Environmental Management

### ENVM\*1000 Introductory Environmental Issues F (3-2) [0.50]

Students will explore a broad range of environmental issues facing society today with particular focus on Canadian and local agriculture. This course will provide an understanding of the living and non-living factors as well as social and economic constraints involved in correctly identifying and resolving environmental issues. The interdisciplinary approach of environmental science is reinforced with real life case studies designed to challenge students to critically assess alternatives and/or possible solutions.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*1020 Introduction to Environmental Microbiology W (2-3) [0.50]

This course will introduce the students to Environmental Microbiology. Topics of discussion will include water and wastewater systems, soils and sediments; as well as the importance of bacteria in disease, nutrition, food and food processing. Students will be introduced to various methods of environmental monitoring such as sampling and testing of public drinking water, how to monitor for cleanliness in food processing facilities as well as water ways used for recreational purposes. Student immunization records are required. See course instructor.

*Restriction(s):* Registered in B.B.R.M. Environmental Management. Instructor consent required.

*Location(s):* Ridgetown

### ENVM\*1050 Surveying and GIS F (3-2) [0.50]

This course covers the basic principals of surveying, map reading and production. The student will learn how to read maps, take precise measurements, use basic survey instruments and create maps and site plans. The student will learn the basics of Geographic Information System (GIS) and the Global Positioning System (GPS) and use these tools to organize and store spatial data. The students will use Remote Sensing techniques for a range of applications.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*1070 Nutrient Management W (3-2) [0.50]

This course will examine the best management practices associated with nutrient management on farms. Emphasis will be placed on the components and development of a nutrient management plan and the safe utilization of various nutrient sources (fertilizers, manures and biosolids) in agricultural production systems.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*1090 Occupational Health and Safety F (3-2) [0.50]

This course explores issues and legal requirements involved in promoting safe communities and work places. Technical, legislative, political, ethical and personal issues are explored. Students will examine and evaluate topics including the Workplace Hazardous Material Information System, Material Safety Data sheets, and the responsibilities of Joint Health and Safety Committees and confined space entry. Hazards to human health resulting from exposure to a variety of physical and chemical hazards found in the workplace will be examined. (First offering - Fall 2007)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*1100 Ecology F (3-2) [0.50]

This course is an introduction to the science of ecology - the study of interactions between organisms and their environments. Major topics include adaptation, populations, communities, biodiversity, ecosystems and competition. Students will analyze the effects of climate change and human activities on ecological processes. A detailed analysis of case studies of several environmental problems will be carried out, using ecological principles. (First offering - Fall 2007)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*1120 Environmental Monitoring W (3-2) [0.50]

This course will introduce the Environmental Management students to various methods used to measure environment impact. Students will achieve a summary understanding of the various government and municipal agency threshold limits and guidelines of the studied environmental parameters such as water quality, vegetation, terrestrial and social impact analysis. Student immunization records required for this course. See course instructor.

*Restriction(s):* Registered in B.B.R.M. Instructor consent required.

*Location(s):* Ridgetown

### ENVM\*1150 Water Resource Management W (3-2) [0.50]

This course will focus on the significance of the various elements of the hydrologic cycle (e.g. precipitation, runoff, infiltration, groundwater recharge and discharge, etc.). The student will examine common water quality standards and the most significant quality problems including causes and pathways that contaminants follow to reach surface water and groundwater, with special focus on agricultural impacts. The course will introduce water and wastewater treatment systems. (First offering - Winter 2008)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*2020 Environmental Law F (3-2) [0.50]

This course will introduce the student to the Canadian legal process. Topics will include how new laws and regulations are developed, drafted, passed and administered in Ontario and across Canada. The course will focus on environmental legislation at both the federal and provincial levels of government. (First offering - Fall 2007)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*2050 Agriculture and Environmental Stewardship F (3-2) [0.50]

This course examines the impact and role of farming in the agro-ecosystem. Lectures and case studies will be used to explore potential pathways of soil degradation and environmental contamination from agriculture, site assessment of environmental risk associated with specific farm operations and the utilization of best management practices for the conservation of soil, water and other natural resources.

*Prerequisite(s):* BIOL\*1030

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*2060 Sewage and Wastewater Treatment F (2-3) [0.50]

This course provides the student with the basic design concepts and operational techniques of industrial and municipal wastewater treatment systems. Treatment processes, optimization and testing methodologies as well as auditing and analytical/operational calculations, legal requirements and operator responsibilities will be addressed. (First offering - Fall 2007)

*Prerequisite(s):* ENVM\*1120

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*2070 Water Treatment F (2-3) [0.50]

This course provides the student with the basic design concepts and operational techniques of industrial and municipal water treatment systems. Treatment processes for ground and surface water, optimization and testing methodologies as well as auditing and analytical/operational calculations, legal requirements of water taking and operator responsibilities will be addressed. (First offering - Fall 2007)

*Prerequisite(s):* ENVM\*1020 is strongly recommended, ENVM\*1120

*Restriction(s):* Registered in B.B.R.M. Environmental Management

*Location(s):* Ridgetown

### ENVM\*2080 Industrial Waste Management W (3-2) [0.50]

The course is designed to give students a thorough understanding of the field of industrial waste management. From a regulatory perspective topics include Ontario non hazardous waste Statutes and Regulations. The course explores the various sub-sets within the field of industrial waste management. Topic areas include municipal and industrial recycling and waste minimization programs with emphasis on the development and design of programs that collect wastes generated in the Industrial, Commercial and Institutional sectors. Waste minimization, ISO 14001 and Environmental Management Systems methodologies are explored. (First offering - Winter 2008)

*Prerequisite(s):* 3.00 credits.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

### ENVM\*2090 Spills Response Planning W (3-2) [0.50]

This course explores both the moral and ethical questions pertaining to the management and abatement of spills reporting, spills remediation and prevention strategies. The course will introduce students to the field of spill response and spill response planning. The current Province of Ontario Spills Legislation will provide the legislative framework for this course. Students will examine the development of industrial contingency and emergency planning. (First offering - Winter 2008)

*Prerequisite(s):* 3.00 credits

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

**ENVM\*2500 Integrated Project (Environmental) W (2-3) [0.50]**

Students will integrate the skills and knowledge gained in earlier courses in analysing the environmental systems of an industry, municipality, agri-business and/or agricultural enterprise. The students will work in teams to complete a detailed Environmental Management System and create environmental policies and action plans. (First offering - Winter 2008)

*Prerequisite(s):* Minimum of 5.00 credits in the B.B.R.M. program, AGE\*1100

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgeway

## Environmental Sciences

### Faculty of Environmental Sciences

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\*1010 Introduction to Environmental Sciences F (3-2) [0.50]

The development of environmental science as an integrative, interdisciplinary approach to understanding and resolving environmental problems. An environmental science problem-solving framework is applied to a series of case studies reflecting the diversity of contemporary environmental issues.

*Restriction(s):* Registration in the B.Sc. (Env.) program.

#### ENVS\*2010 Decision-making and Communication Skills F (1-3) [0.50]

This course will cover basic concepts in creative thinking, research design, and project planning through discussion and application of a problem-solving methodology. A strong emphasis on oral and written presentations is included.

*Prerequisite(s):* ENVS\*1010. Registration in semester 3.

#### 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 Associate Dean's Office (Faculty of Environmental Sciences). Details of the proposed activities will be outlined in a learning contract initiated by the student and agreed by the Associate Dean 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. The course is designed to meet the needs of B.Sc. (Env.) students. (This is not available to students in the B.Sc. (Env.) Co-op program.)

*Prerequisite(s):* 12.50 credits including ENVS\*2010

*Restriction(s):* Instructor consent required.

#### ENVS\*3320 Principles of Landscape Ecology F (3-2) [0.50]

An integrated approach to understanding the functioning of landscapes. The emerging theories, concepts and methodologies of landscape science and their application to landscape and environmental management. (Offered in even-numbered years.)

*Prerequisite(s):* 1 of BIOL\*2010, BIOL\*2060, BIOL\*3110, GEOG\*2110

#### ENVS\*3360 Waste Management and Utilization F (3-2) [0.50]

Students will study sources, characteristics, fate, impact and control of liquid, gaseous and solid wastes. This includes cross-media issues in waste management. Introduction to unit operations and processes for handling and treatment of solid waste, hazardous waste, wastewater and waste gas. Applications will include municipal, industrial and agricultural wastes.

*Prerequisite(s):* CHEM\*2300, (MATH\*2080 or MET\*2030), (BIOL\*1040 or MICR\*1000)

#### ENVS\*4011 Colloquium/Project in Environmental Sciences F (0-1) [0.00]

First part of the two-semester course ENVS\*4011/2. Refer to ENVS\*4011/2 for course description.

*Prerequisite(s):* ENVS\*2010 and registration in semester 7 or 8 of the B.Sc.(Env.) degree program

#### ENVS\*4011/2 Colloquium/Project in Environmental Sciences F-W [0.50]

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. Students must be registered and attend preliminary organizational meetings scheduled in the Fall semester. This is a two-semester course offered over consecutive semesters. When you select it you must select ENVS\*4011 in the Fall semester and ENVS\*4012 in the Winter semester. A grade will not be assigned to ENVS\*4011 until ENVS\*4012 is completed.

*Prerequisite(s):* ENVS\*2010 and registration in semester 7 or 8 of the B.Sc.(Env.) degree program

#### ENVS\*4012 Colloquium/Project in Environmental Sciences W (0-3) [0.50]

Second part of the two-semester course ENVS\*4011/2. Refer to ENVS\*4011/2 for course description.

*Prerequisite(s):* ENVS\*4011

#### ENVS\*4220 Environmental Impact Assessment W (3-0) [0.50]

This course examines environmental impact assessment (EIA) from philosophical, methodological and institutional perspectives. The evolution of EIA in Canada will be the focus. Case studies illustrating major issues and applications will be presented at a variety of geographical scales. The preparation and presentation of a research project is an integral component.

*Prerequisite(s):* 15.00 credits including (1 of BIOL\*2010, BIOL\*2060, BIOL\*3110), (POLS\*3370 or ZOO\*4050, where ZOO\*4050 may be taken concurrently)

#### ENVS\*4500 International Environmental Field Course F (0-6) [0.50]

An interdisciplinary field course to be held overseas. The course will include a common curriculum for all students, dealing with the historical, geographical, cultural and biological aspects of the location. Students will also undertake a project which would normally relate to their own specific interest. Formal instruction on the common core element of the course will be given either by Guelph faculty and/or by faculty from the host country. Each student will submit both a paper developed from the general core of the course and also a project report.

*Prerequisite(s):* 12.50 credits

*Restriction(s):* Approval of the Faculty of Environmental Sciences.

## European Studies

### School of Languages and Literatures

#### **EURO\*1050 The Emergence of a United Europe F (3-0) [0.50]**

This interdisciplinary course will provide students with an understanding of the events and processes resulting in economic integration in Europe after 1945. Economic, historical and political aspects will be emphasized.

#### **EURO\*1200 European Culture from the Mid 18th to the Mid 19th Century F (3-0) [0.50]**

This course explores major trends in European Culture in the context of political and social events. Focus will be on major developments in politics (e.g. the French Revolution, the birth of nationalism), philosophy (e.g. enlightenment, idealism), arts and letters (e.g. classicism, romanticism).

*Restriction(s):* EURO\*2000

#### **EURO\*2070 European Integration, 1957-1992 W (3-0) [0.50]**

This interdisciplinary course aims to provide an in-depth analysis of the development of European integration from the establishment of the EEC to 1992. Major emphasis will be placed on the historical development of the European communities, their economic framework and political institutions. Other attempts at economic integration such as EFTA and Comecon will be considered in less detail.

*Prerequisite(s):* 1 of EURO\*1050, HUMN\*1050, permission from one of the instructor or Coordinator of European Studies

#### **EURO\*2200 European Culture from the Mid 19th Century to the 1920's W (3-0) [0.50]**

This course explores major trends in European culture in the context of political and social events. Topics studied include major political events and their significance for culture (e.g. bourgeois liberalism, revolts in the mid 19th century, World War I and its aftermath), thinkers who have shaped the 20th century (e.g. Nietzsche, Unamuno, Freud), avant-garde movement and innovation in the arts and letters (e.g. impressionism, futurism, expressionism, surrealism).

*Prerequisite(s):* EURO\*1200 is recommended

*Restriction(s):* EURO\*1020

#### **EURO\*2300 European Culture since 1920 F (3-0) [0.50]**

This course explores major trends in European culture in the context of political and social events. The focus will be on political events and their significance for culture (e.g. fascism, World War II and the Holocaust and their effects in the second half of the 20th century, the political reorganization of Europe, protest movements), new trends in thought (e.g. existentialism, structuralism, post-modernism feminism) and the arts and letters (e.g. neorealism epic theatre, new wave cinema).

*Prerequisite(s):* EURO\*1200 and EURO\*2200 are recommended

*Restriction(s):* EURO\*1020

#### **EURO\*3150 Topics in European Film W (3-0) [0.50]**

This course will examine representative French, German, Italian and Spanish films in a socio-political context. It will focus on the interaction between the films' aesthetics and the political and cultural conditions in Europe. The topics to be discussed in the course will centre on the relationship between the development of major movements in European film, such as Italian Neo-Realism and the French, German and Spanish New Waves, and film makers' ideological projects such as the construction or deconstruction of national, gender and ethnic identity. (Offered in even-number years.)

*Prerequisite(s):* EURO\*2300

#### **EURO\*4600 Honours Seminar in European Studies W (3-0) [0.50]**

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.

*Prerequisite(s):* EURO\*1020, EURO\*1050, EURO\*2000, EURO\*2070

*Restriction(s):* Approval of the Coordinator for European Studies.

#### **EURO\*4740 Research Project in European Studies F,W (3-0) [0.50]**

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. Note: In order to demonstrate language proficiency and complete the requirements of EURO\*4740, students have another option. They may choose to spend their third year studying at a European university, in the country where their chosen core language is spoken. Those who can demonstrate that they have successfully written a major academic paper or exam in their chosen core language while registered in a course at a European university as part of their approved study year will be waived from EURO\*4740. See the Coordinator for the European Studies program for more information.

*Prerequisite(s):* EURO\*1020, EURO\*1050, EURO\*2000, EURO\*2070,

*Restriction(s):* Approval of the Coordinator for the European Studies Program.

## External Courses

All courses labeled XCST\*XXXX are Conestoga College Institute of Technology and Advanced Learning Courses. The corresponding Conestoga Course numbers are provided. Detailed course profiles can be accessed through the Conestoga College Institute of Technology and Advanced Learning home page at <http://www.conestogac.on.ca/>. All XCST\*XXXX courses are limited to students in the Career Development Practitioner program.

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 in the B.Sc.(Tech.) program.

All courses labeled XSHR\*XXXX are Sheridan College Institute of Technology and Advanced Learning Courses. The course descriptions appear in the Sheridan College Institute of Technology and Advanced Learning academic calendar and can be accessed through the Sheridan College Institute of Technology and Advanced Learning home page at <http://www.sheridanc.on.ca/>. All XSHR\*XXXX courses are limited to students in the Sports Injury Management program.

### **XSEN\*2010 Effective Business and Technical Writing F (3-0) [0.50]**

This subject introduces the study of technical writing, including specified formats such as memoranda, letters, proposals, and informal reports. The course applies and develops the skills of technical writing in a series of writing assignments placing emphasis on brevity, clarity, conciseness, unity and coherence - all essential to good technical communication. Basic research skills and effective oral communications are also covered. This course is offered at Guelph.

External Course Code(s): Seneca #SES-391

### **XSEN\*2020 Management Studies: Business and Human Relations F (3-0) [0.50]**

This subject concentrates on the human factor within the typical business situation. Its main purpose is to help students develop effective human relations, frameworks and practical human relations, problem-solving skills for the work environment. Selected topics will include: building a positive self-concept; interpersonal communication and listening skills; developing healthy emotions; resolving interpersonal conflict; and building positive relationships for a healthy work environment. This course is taught at Seneca College.

External Course Code(s): Seneca #BUS-203

### **XSEN\*3020 Pharmaceutical Analysis W (2-4) [0.50]**

The aim of this course is to simulate the pharmaceutical quality control laboratory providing students with an inside knowledge of the industry. To accomplish this students are introduced to the pharmaceutical terms, definitions and forms (e.g. Certificate of Analysis), drug legislations, and regulatory agencies (FDA, TPP). Strong emphasis is placed on the navigation and interpretation of pharmacopeial compendia (USP, BP, EP). Other aspects of the course include ICH stability requirements, stability protocols and stability reports. Practical aspects include physical, wet chemical and instrumental analyses of drug substances, in-process materials and finish products using official pharmacopeial methodologies. Calculations (e.g. % Purity, % Impurity and % Label Claim) relating to the analyses described above are dealt with and students are required to use SOPs during all pharmaceutical laboratory sessions to ensure compliance with GMP, GLP, FDA and TPP regulations. This course is taught at Seneca College.

Prerequisite(s): CHEM\*2400, BIOC\*2580

External Course Code(s): Seneca #PHA-333

### **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): CHEM\*2400, BIOC\*2580

External Course Code(s): Seneca #PHT-533

### **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

External Course Code(s): Seneca #OCC-433

### **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): XSEN\*3020

External Course Code(s): Seneca #PHA-533

### **XSEN\*3100 Analog and Digital Communications F,W (3-2) [0.50]**

Students are provided with a good background in the fundamentals of analog communication techniques including modulation schemes (e.g. AM and FM) and associated circuitry. The course also introduces the concepts of digital communications, covering such topics as sampling, PCM, digital multiplexing, and digital modulation. This course is taught at Seneca College.

Prerequisite(s): PHYS\*2040

External Course Code(s): Seneca #ADC-455

### **XSEN\*3120 Microprocessors I F,W (3-2) [0.50]**

This introductory microcontroller subject deals with both the hardware and software of 8-bit devices. The primary example used is the Motorola MC68HC11. The subject examines two major areas: introductory computer/microcontroller concepts, and assembler language programming. A substantial amount of time is devoted to practical laboratory work. This course is taught at Seneca College.

Prerequisite(s): CIS\*2500, PHYS\*2040

External Course Code(s): Seneca #MCO-455

### **XSEN\*3130 Object Oriented Programming Using C++ F,W (2-2) [0.50]**

The course uses the C++ programming language as a tool to implement Object Oriented Programming (OOP) concepts. The OOP concepts such as Classes, Member and Friend Functions, Constructor and Destructor Functions, Operator Overloading, Inheritance, Composition, Virtual Functions and Polymorphism, Stream I/O, Templates and Exception Handling are covered, as well as the OOP methods. This course is taught at Seneca College.

Prerequisite(s): CIS\*2500

External Course Code(s): Seneca #PRG 355

### **XSEN\*3140 Operating Systems F,W (2-2) [0.50]**

This subject explores the system concepts, command languages and application of several operating system platforms such as UNIX. This course is taught at Seneca College.

Prerequisite(s): CIS\*1500, (CIS\*2030 recommended)

External Course Code(s): Seneca #DPR-355

### **XSEN\*4010 Pharmaceutical Calculations W (3-0) [0.50]**

This subject deals with computations relevant to pharmaceutical topics. Included are the representation of scientific and technical data, chemical kinetics and drug stability, osmo-lality and tonicity, pH and solubility, viscosity, phase rule and numerous pharmaceutical calculations (e.g. manufacturing formulas, dosage formulations, radiochemistry, concentration, alligation, HLB, etc.). This course is taught at Seneca College.

Prerequisite(s): CHEM\*2400, BIOC\*3570

External Course Code(s): Seneca #PHC-533

### **XSEN\*4020 Pharmaceutical Organic Chemistry W (1-3) [0.50]**

In this subject 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 (in particular, 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 covered in this subject. This course is taught at Seneca College.

Prerequisite(s): CHEM\*3750

External Course Code(s): Seneca #PAC-633

<b>XSEN*4030 Pharmaceutical Product Formulations W (2-3) [0.50]</b>
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. <i>Prerequisite(s):</i> CHEM*3750 <i>External Course Code(s):</i> Seneca #PPF-633
<b>XSEN*4040 Pharmaceutical Manufacturing W (2-3) [0.50]</b>
An introduction to the important principles and methods related to the production of pharmaceuticals. Topics include methods of manufacture of important dosage forms, regulations governing various dosage forms, good manufacturing practice as defined by regulatory bodies and an overview of the manufacturing plant during the various stages of production with emphasis on GMP. This course is taught at Seneca College. <i>Prerequisite(s):</i> BIOC*3570, CHEM*3750 <i>External Course Code(s):</i> Seneca #PYM-633
<b>XSEN*4050 Biopharmaceuticals W (3-0) [0.50]</b>
This subject introduces the student to the rapidly developing field of biotechnology and biopharmaceuticals. Techniques used in the development of biopharmaceuticals will be emphasized as well as large-scale production of biologicals manufactured by genetic engineering processes. This course is taught at Seneca College. <i>External Course Code(s):</i> Seneca #BPH-633
<b>XSEN*4100 Event Driven Programming and Visual Basic F,W (2-2) [0.50]</b>
This course covers the essential programming concepts supported by the Visual Basic programming language, including: object-oriented programming, database management, activeX controls, file I/O, user-defined data types. Various objects (forms, modules and controls) provided by Visual Basic will be used. The course will introduce the fundamental concepts of the event-driven and visual programming. Visual Basic Professional Edition will be used as the integrated development environment. The interaction between Visual Basic and various DBMS software packages will be introduced. This course is taught at Seneca College. <i>Prerequisite(s):</i> XSEN*3130 <i>External Course Code(s):</i> Seneca #PRG-455
<b>XSEN*4110 Data Acquisition and Control F,W (3-2) [0.50]</b>
This course covers the real-time acquisition and display of analog signals using a PC, interface card, and A/D converter. 'C' will be used as the programming language. The course will cover the basic architecture of the PC as well as interfacing to the PC bus. Graphical programming techniques will be developed for the purposes of displaying and trending sensor data. The course will introduce the fundamental concepts of feedback control using a PC. The course also reviews analog electronics, the purpose being to develop skills in analog interface design. This course is taught at Seneca College. <i>Prerequisite(s):</i> CIS*2500, MATH*2170 <i>External Course Code(s):</i> Seneca #CST-555
<b>XSEN*4120 Data Communications I F,W (4-2) [0.50]</b>
This course has been designed to provide an in-depth understanding of the underlying principles of the rapidly expanding and changing discipline of Data Communications. The following topics in this subject are discussed: terminology, components, network design and configurations, transmission media including fibre optical design methods, protocols, topologies, architectures, private and public network strategies and LAN vendors. This course is taught at Seneca College. <i>Prerequisite(s):</i> XSEN*3100 <i>External Course Code(s):</i> Seneca #DCM-555
<b>XSEN*4130 Networking Essentials F,W (1-3) [0.50]</b>
The major topics covered in this course include: networking overview and topologies, network cabling, network access methods and technologies, network architectures (OSI model) and standards, network protocols, network connectivity, local area network implementation and configuration, Windows 95/98, Windows NT/2K, and Linux. This course is taught at Seneca College. <i>Prerequisite(s):</i> CIS*2500, XSEN*3140, (CIS*2030 recommended) <i>External Course Code(s):</i> Seneca #NET-555
<b>XSEN*4140 Technical and Personal Communications F,W (4-0) [0.50]</b>
This course combines reading, writing, and basic research skills and applied them to technical materials and situations. Today, technical firms insist on strong communication skills in their employees, not just technical competence. Oral and written presentations of material, as well as project-related research, will be required elements of this course. This course is taught at Seneca College. <i>External Course Code(s):</i> Seneca #TPC-455

<b>XSEN*4150 Microprocessors II F,W (3-3) [0.50]</b>
This is the second microcontroller course based on the ADAPT11 EVB Micro Controller System. The course emphasizes Assembly Language program structure, implementation of subroutines, input/output concepts, interrupt utilization, and analog to digital conversion. Students will use an interface which involves switches, LEDs, four 7 segment displays, light sensor, temperature sensor, speaker, infrared transmitter and receiver, and RAM. This course is taught at Seneca College. <i>Prerequisite(s):</i> XSEN*3120 <i>External Course Code(s):</i> Seneca #MCO-555
<b>XSEN*4160 Computer Peripheral Systems F,W (2-2) [0.50]</b>
This course prepares students for the A+ certification examination, and for small business PC network consulting. Topics include WIN 9x and 2K installation, LINUX installation, SCSI and USB, monitors, printers, notebooks, server set up in a multi-OS network, tape backup systems, and digital cameras. This course is taught at Seneca College. <i>Prerequisite(s):</i> XSEN*4130 <i>External Course Code(s):</i> Seneca #PER-655
<b>XSHR*1710 Sheridan--Emergency Conditions U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*1720 Sheridan--Lower Quadrant Composite U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*1730 Sheridan--Field Practice I (100 hours) U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*1740 Sheridan--Protective Equipment U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2710 Sheridan--Field Practice II (200 hours) U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2720 Sheridan--Upper Quadrant Composite U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2730 Sheridan--Modalities U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2740 Sheridan--Field Practice III (150 hours) U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2750 Sheridan--Field Practice IV (250 hours) U (0-0) [1.00]</b>
Offered by Sheridan College.
<b>XSHR*2760 Sheridan--Clinical Assessment Rehab. I U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2770 Sheridan--Functional Anatomy of Spine/Head U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2780 Sheridan--Sports Injury Clinic I U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2790 Sheridan--Mechanics of Lower Quadrant U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2800 Sheridan--Human Adaptation to Exercise U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2810 Sheridan--Clinical Assessment Rehab. II U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2820 Sheridan--Mechanics of Upper Quadrant U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2830 Sheridan--Clinical Assessment Rehab. III U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2840 Sheridan--Clinical Administration U (0-0) [0.50]</b>
Offered by Sheridan College.
<b>XSHR*2850 Sheridan--Manual Therapy U (0-0) [0.25]</b>
Offered by Sheridan College.
<b>XSHR*2860 Sheridan--Field Practice V (200 hours) U (0-0) [0.75]</b>
Offered by Sheridan College.
<b>XSHR*2870 Sheridan--Field Practice VI U (0-0) [0.75]</b>
Offered by Sheridan College.

**XSHR\*2880 Sheridan--Clinical Placement U (0-0) [1.50]**

Offered by Sheridan College.

**XSHR\*2890 Sheridan--Sports Injury Clinic II U (0-0) [0.25]**

Offered by Sheridan College.

## Family Relations and Human Development

*Department of Family Relations and Applied Nutrition.*

*These courses support three majors offered by the Department of Family Relations and Applied Nutrition: Child Studies, Family and Social Relations, and Gerontology.*

### **FRHD\*1010 Human Development F (3-0) [0.50]**

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. (Also offered through distance education format.)

### **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. (Also offered through distance education format.)

*Equate(s):* FRHD\*2010

### **FRHD\*2040 Principles of Program Design for Children W (2-2) [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\*2260, FRHD\*2270

*Equate(s):* CSTU\*2040

*Restriction(s):* Registration in B.A.Sc. Program (Child Studies or Child, Youth & Family majors).

### **FRHD\*2060 Adult Development and Aging W (3-0) [0.50]**

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 FRHD\*1010, PSYC\*1200, SOC\*1100

*Equate(s):* PSYC\*2060

### **FRHD\*2100 Development of Human Sexuality F (3-0) [0.50]**

A social scientific analysis of human sexuality. Emphasis will be placed on the development of sexuality within an interpersonal context. (Also offered through distance education format.)

*Prerequisite(s):* 5.00 credits

### **FRHD\*2110 Exceptional Children and Youth W (3-0) [0.50]**

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. (Also offered through distance education format.)

*Prerequisite(s):* FRHD\*1020, (FRHD\*2270 or PSYC\*2450)

*Equate(s):* CSTU\*2110

### **FRHD\*2260 Infant Development W (3-0) [0.50]**

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. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*1200, (SOC\*1100 or ANTH\*1150)

*Equate(s):* CSTU\*2260

### **FRHD\*2270 Development in Early and Middle Childhood F (3-0) [0.50]**

Examination of development in the early and middle childhood years, with emphasis on family and societal contexts.

*Prerequisite(s):* FRHD\*1010 or (PSYC\*1200 and ANTH\*1150) or (PSYC\*1200 and SOC\*1100)

*Equate(s):* CSTU\*2270

### **FRHD\*2280 Adolescent Development W (3-0) [0.50]**

An examination of psychosocial development in adolescence, emphasizing physiological, social and emotional changes. (Also offered through distance education format.)

*Prerequisite(s):* 1 of FRHD\*2260, FRHD\*2270, PSYC\*2450

*Equate(s):* FRHD\*3080

### **FRHD\*2300 Principles of Program Design for Youth W (3-0) [0.50]**

The course is designed to expose students to the issues and program development strategies that lay the foundation for quality experiences for youth. Students will examine the developmental needs of adolescents, models for programming and the role of the youth worker in a variety of contexts.

*Prerequisite(s):* FRHD\*2270

*Co-requisite(s):* FRHD\*2280

*Restriction(s):* Registration in the Child Studies, or Child Studies Co-op, Child, Youth and Family or Child, Youth and Family Co-op majors.

### **FRHD\*3040 Parenting: Research and Applications F (3-0) [0.50]**

A study of research concerning parent-child relationships, primarily in North American society.

*Prerequisite(s):* FRHD\*1020, (FRHD\*2270 or PSYC\*2450)

### **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):* 10.00 credits including 1 of FRHD\*1020, SOAN\*3100, SOC\*3100

### **FRHD\*3070 Research Methods - Family Studies F (2-2) [0.50]**

A critical examination of research methods in family studies.

*Prerequisite(s):* 10.00 credits

*Restriction(s):* Registration in B.A.Sc. Program.

### **FRHD\*3090 Child and Family Poverty F (3-0) [0.50]**

An examination of the research dealing with children for whom environmental conditions constitute a serious impediment to later development; a consideration of appropriate policies and practices.

*Prerequisite(s):* FRHD\*2110, NUTR\*1010

*Equate(s):* CSTU\*3100

### **FRHD\*3120 Families in Canadian Context W (3-0) [0.50]**

Canadian families are studied from a structural perspective and are placed in social and historical context. Topics include structural variations in family form, work roles within and outside the family, the structural significance of marriage and parenthood, and social policies affecting families.

*Prerequisite(s):* FRHD\*1020

### **FRHD\*3150 Strategies for Behaviour Change F,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):* FRHD\*2110

### **FRHD\*3180 Observation and Assessment F,W (3-0) [0.50]**

Direct observation as a strategy for collecting information on children's behaviour in applied and research settings. Emphasis on theory, recording and interpreting observational data and communicating findings in written reports.

*Prerequisite(s):* (FRHD\*2040 or FRHD\*2300), FRHD\*2110

*Equate(s):* FRHD\*4300

*Restriction(s):* Registration in semester 5 or above in the Child Studies or Child Studies Co-op, Child, Youth & Family or Child, Youth & Family Co-op majors.

### **FRHD\*3190 Administration of Programs for Children and Youth W (3-0) [0.50]**

A study of the roles and responsibilities of administrators in programs for children and youth with emphasis on the development of appropriate policies and procedures; management of human and financial resources; and internal and external communication within the context of multidisciplinary settings. Attention will be given to quality assurance, professional ethics, and continuing professional development. (Offered through Distance Education only.)

*Prerequisite(s):* 10.00 credits including one of FRHD\*2260, FRHD\*2270, PSYC\*2450

*Equate(s):* CSTU\*4270 , FRHD\*4270

### **FRHD\*3200 Practicum - Child, Youth and Family I F,W (3-8) [1.00]**

Seminar and supervised experience with children. The practicum will be 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\*1020, (FRHD\*2040 or FRHD\*2300), NUTR\*1010

*Equate(s):* CSTU\*3170 , FRHD\*3170

*Restriction(s):* Registration in the Child Studies, or Child Studies Co-op, Child, Youth and Family or Child, Youth and Family Co-op majors. Instructor Consent.

**FRHD\*3400 Communication and Counselling Skills S,F,W (3-0) [0.50]**

Examination and analysis of the theories and methods of communication as applied within the processes of family counseling and consultation.

*Prerequisite(s):* 10.00 credits including FRHD\*1020

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

**FRHD\*4020 Family Theory F (3-0) [0.50]**

An analysis of theoretical approaches and concepts in the study of the family.

*Prerequisite(s):* 12.50 credits including FRHD\*1020

**FRHD\*4061 Family and Community: Field Placement F (2-8) [1.00]**

First part of the two-semester course FRHD\*4061/2. Refer to FRHD\*4061/2 for course description.

*Prerequisite(s):* FRHD\*3400

**FRHD\*4061/2 Family and Community: Field Placement F-W [2.00]**

Seminar and supervised field placement in health and social service agencies. The practicum and seminar will further develop and expand students' helping roles in agencies and the integration and application of theoretical knowledge from previous course work with practice. Students wishing to enrol in this course must consult with the instructor during the course selection period. This is a two-semester course offered over consecutive semesters. When you select it you must select FRHD\*4061 in the Fall semester and FRHD\*4062 in the Winter semester. A grade will not be assigned to FRHD\*4061 until FRHD\*4062 is completed.

*Prerequisite(s):* FRHD\*3400

*Restriction(s):* Registration in the Family and Social Relations or Gerontology majors. Instructor consent required.

**FRHD\*4062 Family and Community: Field Placement W (2-8) [1.00]**

Second part of the two-semester course FRHD\*4061/2. Refer to FRHD\*4061/2 for course description.

*Prerequisite(s):* FRHD\*4061

**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.

**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.

**FRHD\*4090 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.

**FRHD\*4100 Dynamics of Group and Family Functioning W (2-2) [0.50]**

An exploration of group processes through participation and laboratory groups. Group theory and current techniques used in group and family counselling will also be reviewed in lectures.

*Prerequisite(s):* FRHD\*3040 or FRHD\*3400

**FRHD\*4160 Family Relations in Gerontology F (3-0) [0.50]**

A critical examination of selected issues affecting the well-being of the elderly in Canada. Topics will include such issues as the nature and types of community support systems for the aged, and institutionalization and its alternatives.

*Prerequisite(s):* FRHD\*3060

**FRHD\*4170 Practicum--Child, Youth and Family II F,W (4-16) [1.00]**

Seminar and experience with children in an appropriate field setting to be assigned by the department. Emphasis will be upon developing, implementing and evaluating program plans for children in educational and community settings. Students will acquire communication and interactive skills with children and adults. Students wishing to enrol in the course must consult with the course instructor during the course selection period.

*Prerequisite(s):* FRHD\*3170 or FRHD\*3200

*Equate(s):* CSTU\*4151/2

*Restriction(s):* Instructor consent required.

**FRHD\*4180 Assessment and Intervention F (2-2) [0.50]**

Principles and theories of assessment and evaluation as related to the child, the family, and to child oriented intervention, education and social service programs.

*Prerequisite(s):* FRHD\*2110, FRHD\*3070, FRHD\*3180

*Restriction(s):* Registration in semester 7 or above in the Child Studies or Child Studies Co-op, Child, Youth & Family or Child, Youth & Family Co-op majors.

**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):* FRHD\*2060

*Restriction(s):* Semester 7 and above.

**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\*2010, FRHD\*2100 and 1.00 credit at the 3000 level in Family and Social Relations, Psychology or Sociology

**FRHD\*4210 Senior Seminar in Early Education and Care F (3-0) [0.50]**

The 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\*3170 or FRHD\*3200

*Equate(s):* CSTU\*4210

*Restriction(s):* Registration in semester 7 or above in the Child Studies or Child Studies Co-op, Child, Youth & Family or Child, Youth & Family Co-op majors.

**FRHD\*4250 Aging and Health F (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 illnesses; 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

**FRHD\*4260 Social Policy and Gerontology W (3-0) [0.50]**

An examination of aging and adult development in relation to social policy with special reference to families.

*Prerequisite(s):* FRHD\*3060

**FRHD\*4310 Professional Issues F (3-0) [0.50]**

This course examines ethical and professional issues in working with children, youth, 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). The complexities of professional practice with diverse populations are explored in depth. Legal aspects relevant to work in this area are also addressed.

*Prerequisite(s):* FRHD\*3400

**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):* FRHD\*3040

**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):* 15 credits, FRHD\*2110, FRHD\*2280

*Restriction(s):* PSYC\*3460

**FRHD\*4810 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 she/he may course select or register for the course.

*Prerequisite(s):* FRHD\*3070. Instructor consent required.

*Equate(s):* CSTU\*4810

**FRHD\*4910 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):* FRHD\*4810

*Equate(s):* FRHD\*4911/2

## Food Science

### Department of Food Science

#### **FOOD\*2010 Principles of Food Science S,W (3-0) [0.50]**

Principles involved in the processing, handling and storage of foods. Relationship of science and technology to food processing. (Offered through Distance Education only.)

*Restriction(s):* AGR\*3330 , FOOD\*2150, FOOD\*3070, NUTR\*2150

#### **FOOD\*2100 Communication in Food Science I 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. Communication achievements made during the undergraduate program will be presented in a communication portfolio in a subsequent course, FOOD\*4100.

*Restriction(s):* Enrolment in the Food Science or Food Science Co-op Majors of the B.Sc. Program.

#### **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. The course is taught by the Department of Food Science. (Also listed as NUTR\*2150.)

*Prerequisite(s):* BIOL\*1040, (CHEM\*1040 or CHEM\*1300)

*Equate(s):* NUTR\*2150

*Restriction(s):* AGR\*3330 , FOOD\*2010, FOOD\*3070. Not available to students registered in Applied Human Nutrition major.

#### **FOOD\*2400 Introduction to Food Chemistry S (3-0) [0.50]**

An introduction to the chemistry and biochemistry of the major components of foods: lipids, proteins, carbohydrates and water/ice. 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. (Offered through Distance Education only.)

*Prerequisite(s):* CHEM\*1040

*Restriction(s):* FOOD\*3010, FOOD\*3100

#### **FOOD\*2410 Introduction to Food Processing W (3-0) [0.50]**

An introduction to 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. This course may not be taken for credit by students in the Food Science Major. (Offered through Distance Education only.)

*Prerequisite(s):* CHEM\*1040, (BIOL\*1040 or MICR\*1020)

*Restriction(s):* FOOD\*3160, FOOD\*3170

#### **FOOD\*2420 Introduction to Food Microbiology F (3-0) [0.50]**

An introduction to the major groups of microorganisms important in foods including sources of contamination during production, processing and storage of foods, microbial spoilage of food, food-borne illness, and food fermentations. Evaluation of food processing conditions used to control the presence and/or growth of microorganisms in foods. This course may not be taken for credit by students in the Food Science Major. (Offered through Distance Education only.)

*Prerequisite(s):* BIOL\*1040 or MICR\*1020

*Restriction(s):* FOOD\*3230

#### **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), (MATH\*1080 or MATH\*1200)

#### **FOOD\*3010 Food Chemistry F (3-2) [0.50]**

A lecture course covering 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 food materials such as lipids, proteins, carbohydrates and water.

*Prerequisite(s):* BIOC\*2580

#### **FOOD\*3020 Food Chemistry Laboratory W (0-6) [0.50]**

An involved laboratory course on various aspects of food chemistry. Emphasis will be placed on the development of strong analytical skills. Laboratory exercises are based on topics covered in FOOD\*3010.

*Prerequisite(s):* FOOD\*3010

#### **FOOD\*3070 Introduction to Food Processing F (3-3) [0.50]**

This course will introduce the basic principles of food chemistry, food microbiology, unit operations in food processing and food product development. The lectures will be supplemented with demonstration and hands-on tutorial exercises. An Experience Agriculture module is also included in this course.

*Prerequisite(s):* AGR\*1250, BIOL\*1040, CHEM\*1050

*Equate(s):* AGR\*3330

*Restriction(s):* FOOD\*2010, FOOD\*2150, NUTR\*2150. Registration in the B.Sc.(Agr.) program.

#### **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):* (FOOD\*2620, MICR\*2030) or ENGG\*2660

#### **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 driers), 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\*3160

#### **FOOD\*3230 Food Microbiology F (3-3) [0.75]**

Important groups of microorganisms associated with food spoilage, food fermentations, food infections and intoxications. Intrinsic and extrinsic factors and their relationship to microbial growth. Control of microorganisms by food processing.

*Prerequisite(s):* MICR\*1020 or MICR\*2030

#### **FOOD\*3260 Industrial Microbiology F (3-3) [0.50]**

The course will present microbiological and technological principles of the industrial application of microorganisms followed by specific examples. These will include different liquid aerobic and anaerobic fermentations, such as the production of organic/amino acids, and ethanol, but excluding the dairy sector. A special focus will be given to winemaking, brewing and antibiotic production. The laboratory component of the course includes several field trips and the production of wine and antibiotics.

*Prerequisite(s):* MICR\*1020 or MICR\*2030

#### **FOOD\*3430 Introduction to Food Analysis F (3-0) [0.50]**

An introduction to quantitative analysis of foods by chemical, physical and instrumental means. Determination of major and minor constituents of foods. (Offered through Distance Education only.)

*Prerequisite(s):* FOOD\*2400

*Restriction(s):* FOOD\*4120

#### **FOOD\*3700 Sensory Evaluation of Foods F (2-3) [0.50]**

Principles of sensory evaluation of foods and a study of the techniques employed.

*Prerequisite(s):* (1 of FOOD\*2150, HAFA\*2700 , HTM\*2700), (1 of STAT\*2040, STAT\*2060, STAT\*2080)

#### **FOOD\*4010 Food Plant Sanitation and Quality Control W (3-0) [0.50]**

Participants will learn and apply principles of hygiene, cleaning chemistry and mechanisms, and will develop and evaluate sanitation programs for specific food processes. Graduates of this course will be able to implement sampling and statistical quality control plans and quality audits. Food Safety programs including both GMP (good manufacturing practices) and HACCP (hazard analysis and critical control point) will be developed for specific cases. A case study approach will be used. Quality management aspects of quality assurance are not included in this course. (Offered through Distance Education only.)

*Prerequisite(s):* (FOOD\*2010 or FOOD\*2150), ( FOOD\*2410 or FOOD\*3160), (FOOD\*2420 or FOOD\*3230)

#### **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. (Offered through Distance Education only.)

*Prerequisite(s):* 8.00 credits in science or engineering or (FOOD\*2010, FOOD\*2410, FOOD\*2420)

**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. The course is co-operatively taught by the Department of Human Health and Nutritional Sciences and the Department of Food Science. (Also listed as NUTR\*4090.)

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

*Equate(s):* NUTR\*4090

**FOOD\*4100 Communication in Food Science II W (2-0) [0.25]**

Each student will present a communication portfolio based on their proposal in FOOD\*2100. Additional communication assignments and work shops will build skills in discussion leading, meeting, management, crisis management and both peer and self evaluation.

*Prerequisite(s):* FOOD\*2100, 2.50 credits at the 3000 level in Food Science

**FOOD\*4110 Meat and Poultry Processing W (2-3) [0.50]**

The course focuses on the principles and techniques employed by the meat industry (the largest food processing segment in Canada). Topics 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. Eggs and egg processing are also covered. Emphasis is put on learning how various food science principles (e.g. preservation, HACCP, emulsification) are used to optimize meat products' quality and safety. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of ANSC\*2340, FOOD\*3070, FOOD\*3160

**FOOD\*4120 Food Analysis F (3-4) [0.75]**

Quantitative analysis of foods by chemical and physical methods. Determination of major and minor constituents of foods.

*Prerequisite(s):* 1 of CHEM\*2400, CHEM\*2480, FOOD\*3100, FOOD\*3010, which may be taken as co-requisite

**FOOD\*4140 Communication in Food Science III S,F,W (0-2) [0.25]**

This course gives the student the opportunity to integrate both communication skills and technical knowledge in Food Science acquired in earlier courses through participation in an independent experiential learning project. The topic of the project may be in any area of Food Science, but an emphasis on communication to a non-scientific audience is required. The project may be conducted in teams of up to four students. 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 course co-ordinator in a prior course selection period.

*Prerequisite(s):* FOOD\*2100, 2.50 credits at the 3000 level in Food Science

*Restriction(s):* Instructor consent required.

**FOOD\*4220 Topics in Food Science S,F,W (0-2) [0.25]**

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):* 2.50 credits at the 3000 level in Food Science

*Restriction(s):* Instructor consent required.

**FOOD\*4230 Research in Food Science I S,F,W (0-2) [0.25]**

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

**FOOD\*4240 Research in Food Science II S,F,W (0-2) [0.25]**

Independent laboratory research of a selected topic in Food Science, under the supervision of an individual faculty. The laboratory research conducted in FOOD\*4230 will be continued and expanded. Students are expected to demonstrate increasing independence in designing, conduction and evaluating 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\*4230

**FOOD\*4400 Dairy Processing W (3-3) [0.50]**

Production, processing, chemistry, microbiology and marketing of fluid milk, frozen dairy products, cheese, fermented dairy foods and butter. Public health aspects of pasteurization, composition and formulation and discussion of the various unit operations involved in processing dairy products.

*Prerequisite(s):* BIOC\*2580, FOOD\*2150, MICR\*2030

**FOOD\*4520 Cereal Technology W (3-3) [0.50]**

The technology and chemistry of the principal cereals; kernel structure and its chemistry with respect to the technological characteristics and nutritive value. Processing of wheat, corn, sorghum, rice, oats and barley; utilization of products and by-products. Bread-making process, dough rheology and technology; breakfast cereals and protein-enriched cereal products. (Offered in even-numbered years.)

*Prerequisite(s):* BIOC\*2580

**FOOD\*4700 Food Product Development W (3-3) [0.50]**

Research, management processes and technological developments relevant to effective food product development are examined. Students work in teams to plan and execute a major food development project and communicate its results.

*Prerequisite(s):* FOOD\*3010 or FOOD\*3100

## French Studies

### *School of Languages and Literatures*

*The School reserves the right to determine the appropriate level to be taken by students enrolling in language courses. With the exception of FREN\*1000, literary texts are, at all levels, studied in French. Students registering in these courses will be expected to have the appropriate language proficiency.*

Francophone students and Graduates of Highschool French Immersion will not normally be admitted into FREN\*1200 and FREN\*2030. It is recommended they start their program with FREN\*2020, FREN\*2060, FREN\*2500, or FREN\*2520 with the approval of the Faculty Advisor.

<b>FREN*1000 Understanding the French Speaking World F (3-0) [0.50]</b>
A course taught in English which introduces students to French culture as it manifests itself in France, Quebec, the rest of North America, Africa, and the West Indies. Historical, linguistic and socio-political issues will be examined within the broader context of culture.
<b>FREN*1090 Basic French: Reading S,F (3-0) [0.50]</b>
A basic course in French grammar and reading for students who have up to Ontario Grade 9 French (or equivalent) but not above. FREN*1090 cannot be counted toward a specialization in French. (Offered through Distance Education only.)
<i>Restriction(s):</i> Francophones and French immersion students will not be admitted to this course. Instructor consent required to verify student's level.
<b>FREN*1100 Basic French: Listening F,W (3-0) [0.50]</b>
A basic course in French grammar with emphasis on listening skills for students who have up to grade 10 French (or equivalent) but not above. FREN*1100 cannot be counted toward a specialization in French. (Offered through Distance Education only.)
<i>Restriction(s):</i> Francophones and French immersion students will not be admitted to this course. Instructor consent required to verify student's level.
<b>FREN*1120 Basic French: Writing S,W (3-0) [0.50]</b>
A basic course in French grammar with emphasis on writing skills for students who have up to Grade 11 French (or equivalent) but not above. FREN*1120 cannot be counted toward a specialization in French. (Offered through Distance Education only.)
<i>Restriction(s):</i> Francophones and French immersion students will not be admitted to this course. Instructor consent required to verify student's level.
<b>FREN*1150 Elementary French F (3-0) [0.50]</b>
A review course in French grammar, oral and written skills for students who have Ontario Grade 11 French or equivalent but not above. FREN*1150 cannot be counted toward a specialization in French.
<i>Equate(s):</i> FREN*1110
<i>Restriction(s):</i> Francophones and French immersion students will not be admitted to this course. Instructor consent required to verify student's level.
<b>FREN*1200 French Language I F,W (3-1) [0.50]</b>
A first year, university-level course for students graduating with a high-school background in core French. Practice in written and oral French.
<i>Prerequisite(s):</i> 1 of FREN*1150, Grade 12U French or permission of the School
<i>Restriction(s):</i> Francophones and French immersion students will not be admitted to this course. Instructor consent required to verify student's level.
<b>FREN*2020 France: Literature and Society F,W (3-1) [0.50]</b>
An historical introduction to French life and thought as seen through literature and art. Lectures and small seminars are integrated into a multi-media presentation including videotapes, slides and audio tapes.
<i>Prerequisite(s):</i> FREN*1200 or FREN*2030
<b>FREN*2030 French Language II F,W (3-1) [0.50]</b>
A continuation of French Language I. Further practice in written and oral French. Grammar, vocabulary acquisition, translation, laboratory exercises. Discussion groups.
<i>Restriction(s):</i> Francophones and French immersion students will not be admitted to this course. Instructor consent required to verify student's level.
<b>FREN*2060 Quebec: Literature and Society F,W (3-1) [0.50]</b>
An historical introduction to Quebec life and thought from New France to the present as seen through literature and art. Lectures and small seminars are integrated into a multi-media presentation including videotapes, slides and audio tapes.
<i>Prerequisite(s):</i> FREN*1200 or FREN*2030
<b>FREN*2500 French Translation I S,W (3-0) [0.50]</b>
An introduction to the art and techniques of French-English translation. (Also offered through distance education format.)
<i>Prerequisite(s):</i> FREN*2030

<b>FREN*2520 French Composition I F (3-0) [0.50]</b>
Essay writing and textual analysis.
<i>Prerequisite(s):</i> FREN*2030
<b>FREN*2540 Spoken French: Theory and Practice W (3-1) [0.50]</b>
A course focussing on the differences between written and spoken French and designed to help students function efficiently in an oral French context (comprehension and expression). Francophones will normally not be admitted to this course.
<i>Prerequisite(s):</i> FREN*2030
<b>FREN*3000 Romanticism and Realism in France F (3-0) [0.50]</b>
A seminar on the 19th-century novel emphasizing themes and ideas which have contributed to contemporary literature and thought.
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3010 Twentieth-Century French Novel W (3-0) [0.50]</b>
A changing world as perceived by 20th-century writers in France. From Gide to post-modernism, the impact of renewed scientific perspectives on literature, and the questioning of modes of representation, signs and society. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3020 Twentieth-Century French Theatre F (3-0) [0.50]</b>
Twentieth-century drama: Sartre, Beckett, Ionesco and more recent dramatists. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3070 Enlightenment and Crisis F (3-0) [0.50]</b>
Prose literature in the 18th century; the questioning of traditional values. The road to revolution.
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3150 Children's Literature in French F (3-0) [0.50]</b>
A study of children's literature in the francophone world from the 17th century to the present.
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3200 Quebec Novel F (3-0) [0.50]</b>
A survey of representative Quebec novels from World War II to the Quiet Revolution. A seminar and lecture course.
<i>Prerequisite(s):</i> FREN*2030, FREN*2060
<b>FREN*3210 Quebec Theatre W (3-0) [0.50]</b>
A survey of recent trends in Quebec drama and readings from representative works by Quebecois playwrights. A seminar and lecture course. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> FREN*2030, FREN*2060
<b>FREN*3220 Recent Quebec Writing W (3-0) [0.50]</b>
An analysis of representative contemporary Quebec novels, short stories and poems from aesthetic, thematic and ideological points of view. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> FREN*2030, FREN*2060
<b>FREN*3230 The Structure of French F (3-0) [0.50]</b>
Elements of the sound system, grammar and vocabulary of contemporary French.
<i>Prerequisite(s):</i> FREN*2030
<b>FREN*3240 French Classicism W (3-0) [0.50]</b>
Human destiny in 17th-century drama.
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3290 Post-colonial Francophone Fiction W (3-0) [0.50]</b>
An introduction to 20th century Francophone writers from Maghreb, Black Africa and the Caribbean, through the study of selected works. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> FREN*2020, FREN*2030
<b>FREN*3500 French Translation II F (3-0) [0.50]</b>
Contrastive grammar (French and English). Analysis of various styles and their application to written translation. Small discussion groups.
<i>Prerequisite(s):</i> FREN*2030, FREN*2500
<b>FREN*3520 French Composition II W (3-0) [0.50]</b>
A continuation of FREN*2520 with special emphasis on stylistics.
<i>Prerequisite(s):</i> FREN*2030, FREN*2520

**FREN\*3530 Business French F (3-0) [0.50]**

This course is a detailed study of the French language as it is currently used in administration and business, both in France and Quebec. It will cover areas such as advertising, administrative reports, employment, communication and levels of language.

*Prerequisite(s):* FREN\*2030

**FREN\*3560 Contemporary French Women's Writings W (3-0) [0.50]**

A study of the main trends in women's writings and feminist criticism in contemporary France. (Offered in odd-numbered years.)

*Prerequisite(s):* FREN\*2020, FREN\*2030

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**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.

**FREN\*4050 Early Modern French Culture W (3-0) [0.50]**

A study of the literature and culture of Medieval and Renaissance France (1200-1600), from the chivalric and religious writings to humanist thought and early French feminism. (Offered in odd-numbered years.)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*3520

**FREN\*4300 Symbolist and Surrealist Poetry W (3-0) [0.50]**

The French Symbolists of the 19th century. The 20th century Surrealist poets' vision of the world. (Offered in even-numbered years.)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*3520

**FREN\*4500 The French Language in Canada W (3-0) [0.50]**

A descriptive, historical and socio-linguistic study of the varieties of French spoken in Canada, with particular emphasis on Quebec. (Offered in odd-numbered years.)

*Prerequisite(s):* FREN\*2030, FREN\*3230

**FREN\*4520 French Translation III F (3-0) [0.50]**

A contrastive analysis of French and English stylistic resources, with application to English-French translation. (Offered in odd-numbered years.)

*Prerequisite(s):* FREN\*2030, FREN\*2500, FREN\*3500

**FREN\*4600 Honours Seminar in French and Quebecois Studies F (3-0) [0.50]**

Seminar on literary genres, movements and themes, or on the French language. (Offered in even-numbered years.)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520

**FREN\*4610 Honours Seminar in French and Quebecois Studies F (3-0) [0.50]**

Seminar on literary genres, movements and themes. (Offered in even-numbered years.)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520

**FREN\*4620 Honours Seminar in French and Quebecois Studies F (3-0) [0.50]**

Seminar on literary genres, movements and themes. (Offered in even-numbered years.) (Last offering - Fall 2006)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520

**FREN\*4630 Honours Seminar in French and Quebecois Studies F (3-0) [0.50]**

Seminar on literary genres, movements and themes. (Offered in even-numbered years.) (Last offering - Fall 2006)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520

**FREN\*4640 Honours Seminar in French and Quebecois Studies F (3-0) [0.50]**

Seminar on literary genres, movements and themes. (Offered in even-numbered years.) (Last offering - Fall 2006)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520

**FREN\*4650 Honours Seminar in French and Quebecois Studies F (3-0) [0.50]**

Seminar on literary genres, movements and themes. (Offered in even-numbered years.) (Last offering - Fall 2006)

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520

**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. Individual attention will be given on methods of research and techniques of writing. This course will be the equivalent of a semester course and is intended to serve as an introduction to future research at the M.A. and Ph.D. levels.

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520. 70% average in all French Studies course attempts. Recommendations: Students with less than a 75% average are advised not to take this course.

*Restriction(s):* Instructor consent required.

**FREN\*4750 Creative Writing in French S,F,W (3-0) [0.50]**

The development and revision of a major work of creative writing in French (fiction, poetry, or drama), under the supervision of a faculty member.

*Prerequisite(s):* (FREN\*2020 or FREN\*2060), FREN\*2030, FREN\*3520, FREN\*4740. 70% average in all French Studies course attempts. Recommendations: Students with less than a 75% average are advised not to take this course.

*Restriction(s):* Instructor consent required.

**FREN\*4770 Research Paper in French Studies II S,F,W (3-0) [0.50]**

Same as FREN\*4740: Research Paper in French Studies I

*Prerequisite(s):* FREN\*2020, FREN\*2030, FREN\*2060, FREN\*3520, FREN\*4740. 70% average in all French Studies course attempts. Recommendations: Students with less than a 75% average are advised not to take this course.

*Restriction(s):* Instructor consent required.

**FREN\*4900 Applied Linguistics: French Studies W (3-0) [0.50]**

A course specially designed for future teachers of French, in which the principles of linguistics are applied to the teaching of French. (Offered in even-numbered years.)

*Prerequisite(s):* FREN\*2030, (FREN\*3230 or LING\*1000), or permission of the department

## Geography

### Department of Geography

*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.Sc. students.**

*For courses without a semester designation, or with an alternate year designation, please check with the department.*

<b>GEOG*1200 Society and Space F,W (3-0) [0.50]</b>
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. (Also offered through distance education format.)
<b>GEOG*1220 Human Impact on the Environment F,W (3-0) [0.50]</b>
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. (Also offered through distance education format.)
<b>GEOG*1300 Introduction to the Biophysical Environment F,W (3-2) [0.50]</b>
An introduction to Physical Geography. The principles and processes governing climate-landform-soil-vegetation systems and interrelationships. Natural and human-induced changes to environmental systems. Laboratories will address techniques of measurement, representation and analysis of environmental systems through maps, air photographs, remote sensing and field observations. (Also offered through distance education format.)
<i>Restriction(s):</i> GEOG*1350
<b>GEOG*1350 Earth: Hazards and Global Change F,W (3-0) [0.50]</b>
An introduction to the principles and processes governing climate-landform-soil-vegetation systems. Emphasis is placed on the interrelationships between human and environmental systems through the examination of natural hazards and global climate change.
<i>Restriction(s):</i> GEOG*1300
<b>GEOG*2000 Geomorphology F (3-2) [0.50]</b>
An introduction to geomorphology emphasizing weathering, slope and fluvial processes within drainage basins, and glacial and periglacial processes. Application of field and laboratory techniques.
<i>Prerequisite(s):</i> 1 of GEOG*1300, GEOG*1350, GEOL*1000 , GEOL*1100
<b>GEOG*2030 International Political Geography F (3-0) [0.50]</b>
Examination of the changing world political map from the perspective of national and ethnic identities, their territorial attachments and intra- and inter-state structures and processes. Territorial restructuring, international law, localization and globalization are considered. Particular attention is paid to settlement and development processes and strategies in various parts of the world.
<i>Prerequisite(s):</i> 5.00 credits, GEOG*1220 is recommended
<b>GEOG*2110 Climate and the Biophysical Environment W (3-1) [0.50]</b>
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.
<i>Prerequisite(s):</i> GEOG*1300 or GEOG*1350
<b>GEOG*2210 Environment and Resources W (3-0) [0.50]</b>
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. (Also offered through distance education format.)
<i>Prerequisite(s):</i> GEOG*1220 is recommended
<b>GEOG*2230 Economic Geography F (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> GEOG*1200

<b>GEOG*2260 Applied Social Geography W (3-2) [0.50]</b>
This course focuses on the study of social relations and the spatial structures that underpin those relations. It introduces students to a range of topics in social geography, including housing, crime, social justice, difference and identity politics, social constructions of nature, and cultural landscapes. The course uses these topics as a springboard for exploration and application of key research methods and techniques in human geography. The lab component of the course focuses on data collection and analysis using social survey methods, interviewing techniques, ethnographic field study, and use of published data and secondary documents.
<i>Prerequisite(s):</i> GEOG*1200
<b>GEOG*2420 Aerial-photo Interpretation F (2-3) [0.50]</b>
An introduction to the principles and techniques of air photo interpretation and elementary photogrammetry. 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.
<i>Prerequisite(s):</i> 0.50 credits in geography and/or earth science
<b>GEOG*2460 Analysis in Geography F (3-2) [0.50]</b>
The application of modern techniques to geographic study. The interpretation of geographic phenomena by objective methods. Major honours students in Geography must complete this course by the end of semester 4.
<i>Prerequisite(s):</i> 0.50 credits at the 1000 level in Geography
<b>GEOG*2480 Mapping and GIS W (3-2) [0.50]</b>
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 honours students in Geography must complete this course by the end of semester 4.
<i>Prerequisite(s):</i> 5.00 credits
<b>GEOG*2510 Canada: A Regional Synthesis W (3-0) [0.50]</b>
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.
<b>GEOG*3000 Fluvial Processes F (3-2) [0.50]</b>
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.
<i>Prerequisite(s):</i> GEOG*2000, (GEOG*2460 or STAT*2040)
<b>GEOG*3020 Global Environmental Change F (3-1) [0.50]</b>
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 policy ramifications. (Also offered through distance education format.)
<i>Prerequisite(s):</i> 7.50 credits, (GEOG*2210 recommended)
<b>GEOG*3050 Development and the City W (3-0) [0.50]</b>
This course examines different theoretical and policy perspectives of urbanization and urban development, as well as social, economic and environmental living conditions in cities of the global "south". It refers to concrete examples of cities in their national and international context, paying due attention to diversity and the fluidity of urban-rural boundaries. Specific urban development issues, including migration, housing, employment, health and environment are also addressed.
<i>Prerequisite(s):</i> 7.50 credits, (GEOG*2030 and GEOG*2260 recommended)
<b>GEOG*3090 Gender and Environment F (3-0) [0.50]</b>
This course introduces feminist scholarship and perspectives to explore men and women's experiences with both the natural and built environment. The course draws on case studies from developing and developed countries to demonstrate the importance of gender difference in understanding human interactions with the environment. Students will observe gendered use, access, knowledge, responsibility and control in rural and urban landscapes.
<i>Prerequisite(s):</i> 7.50 credits, (GEOG*2210 and GEOG*2260 recommended)

**GEOG\*3110 Biotic and Natural Resources F (2-2) [0.50]**

This course focuses on the ecological basis for resource management, evaluates a number of current ecological theories and addresses their implications for resource management.

*Prerequisite(s):* (GEOG\*2460 or STAT\*2040), (1 of BIOL\*2060, BOT\*2050, ENVB\*2030, GEOG\*2110)

**GEOG\*3210 Management of the Biophysical Environment F (3-0) [0.50]**

An examination of resource management, focusing on public and private decision-making processes. Consideration of techniques for evaluating resources, including EIA and risk analysis. Emphasis is on the economic, social and environmental implications of resource development and use. Contemporary Canadian case studies will be presented at appropriate scales. (Also offered through distance education format.)

*Prerequisite(s):* 7.50 credits including GEOG\*2210

**GEOG\*3320 Agriculture and Society F (3-0) [0.50]**

This course adopts a geographical perspective in exploring the structure and functioning of agriculture and food systems in contemporary society. Particular attention is paid to the interaction of farms with the social, economic, institutional and environmental forces that combine to shape local types and regional patterns of agricultural activity. The concept of sustainability is used as an integrating theme for the consideration of selected issues.

*Prerequisite(s):* 7.50 credits

**GEOG\*3420 Remote Sensing of the Environment W (2-3) [0.50]**

This course explores the nature and acquisition of remotely sensed imagery, and provides students with the technical expertise required to process and interpret this type of digital data. The application of digital image processing techniques to analyzing geographic problems is stressed, and its integration in a Geographic Information Systems (GIS) environmental is demonstrated.

*Prerequisite(s):* 10.00 credits including GEOG\*1300

**GEOG\*3480 GIS and Spatial Analysis F,W (3-2) [0.50]**

This course focuses on the use of raster and vector-based geographic information systems to analyze spatial data. Topics include map digitizing, data query and overlay, spatial interpolation, multi-criteria evaluation, least cost pathway determination and digital elevation models. This course requires some familiarity with numerical methods and computer operations.

*Prerequisite(s):* 10.00 credits, including GEOG\*2480

**GEOG\*3490 Tourism and Environment W (3-0) [0.50]**

An integrative perspective on tourism, addressing diverse interactions between people and tourist resources. Emphasis is on experiences derived from the use of resources, the environmental, economic and cultural impacts of tourism, and approaches to managing these impacts. (Also offered through distance education format.)

*Prerequisite(s):* 7.50 credits

**GEOG\*3600 Geography of a Selected Region U (3-0) [0.50]**

The study of an area which will include topics in physical, economic, social and historical aspects of geography.

*Prerequisite(s):* 7.50 credits

**GEOG\*3610 Environmental Hydrology W (3-1) [0.50]**

An introductory course in hydrology, the study of water in the environment. Emphasis is placed on understanding and modeling the hydrologic cycle. Topics include hydrologic processes, water resources, and case studies of freshwater systems.

*Prerequisite(s):* 7.50 credits, (GEOG\*2460 or STAT\*2040), (1 of GEOG\*2000, GEOG\*2110, or another 2000 level earth science or engineering science course is recommended)

**GEOG\*3620 Desert Environments F (2-2) [0.50]**

This course investigates the interrelationships among various biophysical processes that control weathering rates, sediment transport and landform/landscape development in arid environments. Topics will include: the concept of desertification, use and misuse of surface and ground water, salinization and the effect of human disturbance on landscape development. (Offered in even numbered years.)

*Prerequisite(s):* 7.50 credits, (GEOG\*2460 or STAT\*2040), (1 of GEOG\*2000, GEOG\*2110, or another 2000 level earth science or engineering science course is recommended)

**GEOG\*4110 Environmental Systems Analysis F (2-2) [0.50]**

An integrated systems approach to solving issues of environmental evaluation, impact and development. Focus will be on the biophysical components of the environment.

*Prerequisite(s):* GEOG\*3110 or GEOG\*3610

**GEOG\*4150 Sedimentary Processes W (2-2) [0.50]**

This course examines the basic properties and flow characteristics of fluids that control the entrainment and transport of sediment by air and water. Bedform development in fluvial, coastal and aeolian environments are also discussed in relation to fluid flow mechanics. Lectures are complemented by weekly labs using the wind tunnel, flume and wave tank.

*Prerequisite(s):* GEOG\*3000

**GEOG\*4200 Seminar in Urban Geography W (3-0) [0.50]**

Many of the traditional features of cities are changing in light of powerful forces of globalization. The course examines spatial patterns and processes of economic restructuring, social dynamics and political change in Canadian and non-Canadian cities. Students discuss and interpret evolving urban forms from a geographical perspective.

*Prerequisite(s):* GEOG\*2260, (GEOG\*3050 recommended)

*Restriction(s):* GEOG\*3400

**GEOG\*4210 Environmental Resource Analysis F (3-1) [0.50]**

This course provides an opportunity for advanced studies in resource and environmental management. A central aim is developing an understanding of principles, practices and emerging issues relating to resource and environmental evaluation and management.

*Prerequisite(s):* GEOG\*3210

**GEOG\*4250 Coastal Processes F (2-2) [0.50]**

This course examines the geomorphic processes and associated landforms found in the coastal zone. Initially the focus is on developing an understanding of the major controls on coastal erosion and sediment transport, including waves, nearshore currents and water level fluctuations. This is followed by the study of features and processes in selected coastal environments such as beaches, barrier islands and spits, coastal sand dunes and bluff coasts. In each case applications to problems of coastal management are introduced.

*Prerequisite(s):* 1 of GEOG\*3000, GEOG\*3610, GEOG\*3620

**GEOG\*4390 Seminar in Rural Geography F (3-0) [0.50]**

This course surveys themes and issues in contemporary rural geography. Specific attention is given to the processes of restructuring and change in rural systems in Canada and other developed economies. Themes include transformations in the use of rural land, the new rural economy, restructuring in service delivery, and the sustainability of rural communities and systems.

*Prerequisite(s):* GEOG\*2260, GEOG\*3320

**GEOG\*4480 Applied Geographic Information Systems W (2-2) [0.50]**

This course adopts a project-oriented approach to the application of Geographic Information Systems (GIS) in spatial analysis. Students will have the opportunity to design and implement a research project using GIS techniques to investigate a problem in any area of Geography.

*Prerequisite(s):* GEOG\*3480

**GEOG\*4690 Geography Field Research F (3-6) [1.00]**

This course provides an opportunity for senior students to develop skills in the design, implementation and presentation of a field research project. The course involves a field trip of about 10-14 days, either in Canada or abroad. This component of the course takes place between the end of the summer session and the start of classes in the fall semester. Classes during the fall semester focus on the analysis and interpretation of data and incorporate student research seminars. Information on the location and cost of the field research course is available from the department in the winter semester prior to each fall offering.

*Prerequisite(s):* 12.50 credits

*Restriction(s):* Restricted to majors in Geography B.A. and B.Sc.(Env.) and in Earth Surface Science (B.Sc.) with an overall average of at least 70% at the time of registration.

**GEOG\*4880 Contemporary Geographic Thought W (3-0) [0.50]**

A critical overview of the evolution and current status of Geography. Particular emphasis will be given to the variety of approaches and convergence and divergence within the discipline. The interaction between human and physical geographers and their approaches to issues and the subject will be analyzed.

*Restriction(s):* Restricted to major honours students in Geography at semester 6 or above.

**GEOG\*4990 Independent Study in Geography U (3-0) [0.50]**

The independent study option is designed to provide senior undergraduate students with an opportunity to pursue library or field research under faculty supervision and to prepare a research report. Formal agreement between the student and the faculty supervisor is required, as is approval of the department chair.

*Restriction(s):* Restricted to majors in Geography B.A. and B.Sc.(Env.) and in Earth Surface Science (B.Sc.) with an overall average of at least 70% at the time of registration.

## Geology

*Department of Land Resource Science*

### **GEOL\*1050 Geology and the Environment F (2-3) [0.50]**

Geological materials, their origin, recognition and economic potential, use and location; oil and gas, coal, mineral deposits, aggregate resources, groundwater, Geological basis for environmental evaluation and land use. Emphasis on local and North American examples.

### **GEOL\*1100 Principles of Geology F,W (3-0) [0.50]**

Introduction to geological principles, their historical development and application to interpreting Earth materials and processes. Suitable for those wishing a general knowledge of earth sciences. (Also offered through distance education format.)

*Restriction(s):* GEOL\*1040, UNIV\*1030. May not be taken for credit by students in B.Sc.(Env.) Earth and Atmospheric Science Major, or B.Sc. Degree program.

### **GEOL\*2020 Stratigraphy F (3-0) [0.50]**

Principles of recognizing and interpreting earth surface environments using examples from geology, geomorphology and archeology. Brief summary of sediment identification, recognition of processes and environments. Section description and interpretation followed by principles of physical correlation and facies interpretation. Concepts of physical, biological and radiometric dating. Controls on stratigraphic sequence development - isostasy, eustasy and tectonics. Sedimentary basin development, interpretation and history including changes in atmosphere, hydrosphere and biosphere. (Offered in even-numbered years.)

*Prerequisite(s):* 1 of GEOL\*1000, GEOL\*1050, GEOL\*1100, GEOG\*1300, GEOG\*1350 or equivalent

### **GEOL\*2110 Earth Material Science F (3-3) [0.50]**

Minerals are the building blocks of rocks, and rocks are the basis of the earth's crust. The nature, classification and recognition of the common rocks and minerals and their chemical and physical transformations is dealt with. Emphasis is on the role that minerals and rocks play in determining the abiotic character of earth-surface environments.

*Prerequisite(s):* 1 of GEOL\*1000, GEOL\*1050, SOIL\*2200

*Restriction(s):* GEOL\*2100, GEOL\*3070

### **GEOL\*2160 Glacial Geology W (3-0) [0.50]**

Identical to GEOL\*2200 but without laboratory. Lectures taken with GEOL\*2200.

*Prerequisite(s):* 1 of GEOG\*1300, GEOL\*1000, GEOL\*1050, GEOL\*1100, SOIL\*2010

*Restriction(s):* GEOL\*2150, GEOL\*2200

### **GEOL\*2200 Glacial Geology W (3-3) [0.50]**

This course is designed to give students an introduction to the processes, landforms and deposits of glacial environments. This includes basic principles of glaciology, the landforms and deposits found in various glacial and periglacial environments, and the nature of past glaciations in Earth history. Ancient to recent glacial deposits from the Great Lakes region and other international locations will be examined. A field trip will be scheduled.

*Prerequisite(s):* 1 of GEOG\*1300, GEOL\*1000, GEOL\*1050, GEOL\*1100, SOIL\*2010, AGR\*2301, SOIL\*2200

*Restriction(s):* GEOL\*2160, GEOL\*2150

### **GEOL\*2250 Geology of Natural Disasters S (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. (Offered through distance education format only.)

*Prerequisite(s):* 1 of GEOG\*1300, GEOG\*1350, GEOL\*1050, GEOL\*1100

### **GEOL\*3060 Groundwater W (3-0) [0.50]**

This course provides a general understanding 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):* 1 of IPS\*1110, MATH\*1000, MATH\*1080, MATH\*1200

### **GEOL\*3090 Applied Structural Geology W (3-0) [0.50]**

Systematic study of structural elements of the earth crust. Introduces concepts on the distribution, origin and structural development of the major landforms in North America and other continents (plate tectonics). The course provides examples of structural geology applied to engineering, environmental geology, and ore geology. Hands-on experience on deformation analysis, slope stability and interpretation of structures during the field trip and in classroom simulations. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of GEOL\*1000, GEOL\*1050, suitable geomorphology credit

### **GEOL\*3100 Non-Renewable Earth Resources W (3-0) [0.50]**

An analysis of processes leading to formation and accumulation of principal non-renewable metallic and non-metallic mineral and fuel resources. Methods of extraction and processing, economic assessment, environment problems associated with resource development. Field trips may be scheduled. (Offered in even-numbered years.)

*Prerequisite(s):* (GEOL\*1000 or GEOL\*1050), 0.50 credits at the 2000 level in geology or geomorphology

### **GEOL\*3120 Paleontology W (3-0) [0.50]**

Basic principles of analysis of fossil communities (mostly marine). Students should already know the basic biology of common marine invertebrates. Sediment analysis and process interpretation to determine paleoenvironments. Analysis of fossil preservation, autecology and population structures of species; community paleoecology of selected fossil assemblages. Simple paleobiogeography and basics of community evolution through time. Stages in the evolution of marine and continental ecosystems possible causes including physical (sea-levels, meteorite impacts) and biological (predation, evolution) components. This is not a 'history of life' course. (Offered in even-numbered years.)

*Prerequisite(s):* ZOO\*2070

*Restriction(s):* GEOL\*3110

### **GEOL\*3130 Agrogeology W (3-0) [0.50]**

Inter-disciplinary course: geology; soil, crop and horticultural sciences; international development. The geological basis of farming, application of agrominerals, such as phosphates, limestones, gypsums, as well as fertilizers in agriculture and horticulture. Evaluating the environmental effects of mining/processing of agrominerals and the use of fertilizers. Case studies and experiences from around the world.

*Prerequisite(s):* 1 of AGR\*2301/2, GEOL\*1000, GEOL\*1050, SOIL\*2010, SOIL\*2200

### **GEOL\*3190 Environmental Water Chemistry F (3-0) [0.50]**

An examination of the chemical composition of both natural and contaminated waters at the earth's surface and the interaction of these waters with soils and sediments. The significance of these interactions will be studied with respect to the mobility of organic and metallic constituents in geochemical cycles and as contaminants in the environment.

*Prerequisite(s):* 1 of CHEM\*1010, CHEM\*1050, CHEM\*1310

### **GEOL\*3250 Field Methods in Geosciences F (2-2) [0.50]**

This course is designed to provide experience in field methods and applied aspects of Earth surface science. The field camp portion will focus on geological mapping skills, while the rest of the term will be spent on developing a consulting proposal for a field-based project. Other topics covered will be project design, proposal writing, oral communication skills and ethics of field-based research. Students are required to notify the designated departmental instructor of their intention to participate in this course during the previous Winter semester. There will be a fee to cover partial costs in this course; students in financial need should approach the Chair of the department.

*Prerequisite(s):* (GEOL\*1000 or GEOL\*1050), GEOG\*2000, GEOL\*2150

*Restriction(s):* Restricted to Earth Surface Science Majors. Instructor consent required.

### **GEOL\*4090 Sedimentology F (3-3) [0.50]**

Origin, transport, deposition of sediments, and formation of sedimentary rocks. Emphasis will be on the interpretation of recent and ancient environments of deposition, and on the uses of sedimentary materials. Six laboratories will be scheduled as field trips. One Saturday field trip may be scheduled. (Offered in even-numbered years.)

*Prerequisite(s):* (1 of GEOL\*2020, GEOL\*2150, GEOL\*2200, equivalent), (0.50 credit at the 3000 level in the GEOG\*XXXX or GEOL\*XXXX grouping or equivalent)

### **GEOL\*4110 Topics in Earth Science F,W (3-0) [0.50]**

Lecture-discussion or seminar on selected topics in Earth Science 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 specific semesters. Field trips will be scheduled as required.

*Prerequisite(s):* (1 of GEOG\*1300, GEOL\*1000, GEOL\*1050), 0.50 credits at the 3000 level in a science appropriate to chosen topic

*Restriction(s):* Instructor consent required.

**GEOL\*4120 Topics in Earth Science F,W (3-0) [0.50]**

Lecture-discussion or seminar on selected topics in Earth Science 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 specific semesters. Field trips will be scheduled as required.

*Prerequisite(s):* (1 of GEOG\*1300, GEOL\*1000 , GEOL\*1050), 0.50 credits at the 3000 level in a science appropriate to chosen topic

*Restriction(s):* Instructor consent required.

**GEOL\*4130 Clay and Humic Chemistry W (3-2) [0.50]**

This course is a study of the fundamental chemistry of clay minerals and humic substances in the environment, with particular reference to soils, sediments and waters. Emphasis will be placed on their structures and charge characteristics in the context of surface complexation modeling of proton binding and cation and anion adsorption. (Offered in even-numbered years.)

*Prerequisite(s):* SOIL\*3060 or GEOL\*3190

*Restriction(s):* GEOL\*4060

## 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.*

#### **GERM\*1100 Introductory German I F,W (3-1) [0.50]**

A beginning 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 12 or OAC German.

#### **GERM\*1110 Introductory German II F,W (3-1) [0.50]**

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 OAC German.

*Prerequisite(s):* GERM\*1100 or equivalent

#### **GERM\*2240 Germany Through the Ages W (3-0) [0.50]**

A survey of German history, society and culture illustrated by art, music, film and literature. This course is taught in English.

#### **GERM\*2400 Contemporary Germany W (3-0) [0.50]**

A multimedia approach to contemporary German culture, 20th-century history and recent political events. Emphasis on oral work in German.

*Prerequisite(s):* GERM\*1110 or equivalent

#### **GERM\*2490 Intermediate German I F (3-1) [0.50]**

Systematic oral and written practice with discussion of contemporary texts, and comprehensive grammar review.

*Prerequisite(s):* 1 of OAC German, GERM\*1110, equivalent

#### **GERM\*2500 Intermediate German II W (3-1) [0.50]**

Further development of conversational and writing skills; introduction to more complex grammar.

*Prerequisite(s):* GERM\*2490 or equivalent

#### **GERM\*2560 Themes in German Literature/Culture W (3-0) [0.50]**

This course aims to provide students with basic skills for interpreting literary texts through an exploration of themes that have shaped German literature and culture. Note: Students intending to take both GERM\*2560 and GERM\*2590 should take GERM\*2560 before GERM\*2590.

*Prerequisite(s):* GERM\*2490 or permission of the instructor

#### **GERM\*2590 Classics of German Literature F (3-0) [0.50]**

This course is designed to introduce students to German literary texts which could be considered classics. Note: Students intending to take both GERM\*2560 and GERM\*2590 should take GERM\*2560 before GERM\*2590.

#### **GERM\*3020 Myth and Fairy Tales in Germany F (3-1) [0.50]**

The course explores the role of mythology, fairy tales and legends in late 18th- and 19th-century German literature and culture in the context of socio-political developments. 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), romantic mythology in music, art and literature. Authors may include Goethe, Brothers Grimm, ETA Hoffman, Wagner. Lectures and texts are English. Students registered in GERM\*3020 will meet a fourth hour per week to discuss texts in German. This course is offered in conjunction with HUMN\*3020. (Offered in even-numbered years.)

*Prerequisite(s):* GERM\*2560, GERM\*2590

*Equate(s):* HUMN\*3020

*Restriction(s):* GERM\*3440 , HUMN\*3440

#### **GERM\*3420 Late 18th-and 19th-Century Drama W (3-1) [0.50]**

German-language drama from ca. 1780 to ca. 1900 within a European context, including enlightenment, revolutionary and naturalist drama. This course is offered in conjunction with HUMN\*3420. Lectures are in English. Students registered in GERM\*3420 will meet a fourth hour per week to discuss texts in German. (Offered in odd-numbered years.)

*Prerequisite(s):* GERM\*2560, GERM\*2590

*Restriction(s):* HUMN\*3420

#### **GERM\*3430 Tradition and Innovation in 20th-Century Drama W (3-1) [0.50]**

Trends, themes and theories in 20th-century German-language drama, with particular focus on significant innovations (e.g. expressionist drama, Brecht's epic theatre). This course is offered in conjunction with HUMN\*3430. Lectures are in English. Students registered in GERM\*3430 will meet a fourth hour per week to discuss texts in German. (Offered in even-numbered years.)

*Prerequisite(s):* GERM\*2560, GERM\*2590

*Restriction(s):* HUMN\*3430

#### **GERM\*3450 20th-Century German Literature and Film F (3-1) [0.50]**

Trends and cultural movements that have shaped the 20th-century as reflected in works of major writers (e.g. Mann, Kafka, Grass, Wolf) and film directors (e.g. Fassbinder). This course is offered in conjunction with HUMN\*3450. Lectures are in English. Students registered in GERM\*3450 will meet a fourth hour per week to discuss texts in German. (Offered in even-numbered years.)

*Prerequisite(s):* GERM\*2560, GERM\*2590

*Restriction(s):* HUMN\*3450

#### **GERM\*3500 Advanced German F (3-0) [0.50]**

A study of advanced German grammar as well as aspects of structure and style of the German language. Oral presentations and discussions with a special emphasis on essay writing. Translation into idiomatic German and English.

*Prerequisite(s):* GERM\*2500

#### **GERM\*3530 German in the Workplace W (3-0) [0.50]**

This course is designed to enable students to communicate and interact appropriately in professional and business situations.

*Prerequisite(s):* GERM\*2500 or equivalent

#### **GERM\*3600 Directed Readings in German Studies U (3-0) [0.50]**

A reading course in German literature designed according to the program and interest of the individual student.

*Restriction(s):* Instructor consent required.

#### **GERM\*4940 Research Paper in German Studies U (3-0) [0.50]**

A reading course on some approved topic in German language or literature, leading to an end-of-term research paper.

*Restriction(s):* Instructor consent required.

## 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.)*

#### **GREK\*1100 Preliminary Greek I F (3-0) [0.50]**

A beginning course in Greek, providing the fundamentals of structure and idiom. (This course may not be taken by anyone who has OAC Greek).

#### **GREK\*1110 Preliminary Greek II W (3-0) [0.50]**

A continuation of GREK\*1100.

*Prerequisite(s):* GREK\*1100 or high school year 4 (Grade 12) Greek

#### **GREK\*2020 Greek Language and Culture F (3-0) [0.50]**

Consolidation of fundamental morphology and syntax acquired in GREK\*1100 and GREK\*1110. Intensive reading in texts that also illuminate aspects of Greek culture.

*Prerequisite(s):* GREK\*1100, GREK\*1110

## History

### Department of History

*Students wishing to take a 3000 level course must have pass standing in at least 4.50 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 (C) are core courses required of all History program students.*

*Courses marked (H) are honours courses. Students in a general program wishing to take these must obtain the permission of instructors concerned.*

#### **HIST\*1010 Europe and the Early Modern World F,W (3-0) [0.50]**

This course will deal with the evolution and expansion of European society during the pre-industrial era. Commencing with the upheavals of 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. (C)

#### **HIST\*1150 20th-Century Global History F,W (3-0) [0.50]**

Twentieth-century world history with particular emphasis on Asia, Africa, and Latin America.

#### **HIST\*1250 Science and Society Since 1500 F (3-0) [0.50]**

This course is intended as an introduction to the history of science and its interrelationships with society in the western world since 1500, including its influence on the environment, religion, economics and political developments, warfare, etc. Particular emphasis will be laid upon scientific developments in the 19th or 20th centuries.

*Restriction(s):* ASCI\*1000

#### **HIST\*2000 The British Isles, 1066-1603 S,F (3-0) [0.50]**

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.

#### **HIST\*2020 Film as History W (2-1) [0.50]**

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.

#### **HIST\*2040 War and Society W (3-0) [0.50]**

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.

#### **HIST\*2070 World Religions in Historical Perspective W (3-0) [0.50]**

This course introduces students to the comparative study of religion in history and the interaction of religion with general social and cultural traits over time. A focus on the cultural roots of specific traditions and religion as a metaphor will account for the spread of these diverse traditions across social and national boundaries. This course will consider eastern religions, primal religions, 'People of the Book' (Judaism, Christianity and Islam considered together), and the 'New Religious Movements' (a category considering religions and para-religions produced by modernity). (Offered through distance education format only).

#### **HIST\*2100 Pre-Confederation Canada F (3-0) [0.50]**

A study of selected events and issues in pre-Confederation Canadian history including political, economic, social, and cultural developments (C).

*Restriction(s):* HIST\*2601/2

#### **HIST\*2110 The Atlantic World 1500-1850 F (3-0) [0.50]**

A study of the comparative histories of colonial societies of England, France, Spain and Portugal in a transatlantic context. This course will compare for regional interconnections as well as the uniqueness of each society.

#### **HIST\*2150 U.S.A.: Revolution to Reconstruction F (3-0) [0.50]**

History of the United States from 1760 to 1877. The course will consider themes such as the creation of a national identity, sectionalism and Civil War, immigration, and the growth of modern American society.

#### **HIST\*2200 The Medieval World W (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.

#### **HIST\*2250 Environment and History F,W (3-0) [0.50]**

An introduction to the field of environmental history - its nature and uses. This course provides a historical perspective to environmental issues. It examines the causes and impact of human-induced modification of the natural world in selected areas of the globe, the evolution of attitudes and ideas about the natural world over time and the growth of conservation/environmental issues and movements. (Also offered through distance education format.)

#### **HIST\*2260 Religion and Society in the Modern World F (3-0) [0.50]**

A survey of the major trends in religious beliefs and practices and their social impact since the Reformation. The focus of the course is on the British Isles and North America with some discussion of developments in Continental Europe.

#### **HIST\*2390 Imperial and Soviet Russia Since 1800 W (3-0) [0.50]**

An introductory survey of Russian History from the death of Catherine the Great to the onset of World War II. This course will focus on efforts by Russian rulers to modernize the Empire's social and economic institutions in response to Western influence. (Offered in odd-numbered years.)

#### **HIST\*2450 The Practicing Historian F,W (3-0) [0.50]**

A course designed to acquaint students with the development of historical writing, the interpretive problems surrounding the study of history, and the methods employed by historians. (C) (Also offered in distance education format.)

*Prerequisite(s):* 1.00 credits in history at the 1000 or 2000 level

#### **HIST\*2500 Britain and the World Since 1600 U (3-0) [0.50]**

This course will survey the history of England and the Celtic Regions of the British Isles from the close of the Tudor period up to the mid-20th century. Emphasis will be placed on social and economic development before and after the Industrial Revolution as well as on those political and military challenges which have characterized Britain's status as a global power in the modern era.

#### **HIST\*2510 The Emergence of Modern European Society 1789-1945 F (3-0) [0.50]**

This course will deal with the emergence of modern European society as the result of socio-economic and consequent political changes from the French Revolution to the end of World War II.

#### **HIST\*2600 Post-Confederation Canada W (3-0) [0.50]**

This course is a study of selected events and issues in post-Confederation Canadian history including political, economic, social, and cultural developments (C).

*Prerequisite(s):* HIST\*2100

*Restriction(s):* HIST\*2601/2

#### **HIST\*2610 Contemporary Canadian Issues S (3-0) [0.50]**

A study of selected issues in modern Canadian history. The subjects investigated such as natives, the environment, the state, the family, will vary with the expertise of the instructor.

#### **HIST\*2650 America Since 1877 W (3-0) [0.50]**

A survey of the history of the United States since Reconstruction. Political, social and intellectual developments will be covered, as will the rise of America to world power.

#### **HIST\*2800 The History of the Modern Family W (3-0) [0.50]**

An examination of the family since 1500 with particular emphasis on the English speaking world, though comparisons will be made with other societies. Topics considered will include: change in the legal structure of marriage; power relations and sex roles within the family; the role of kin in the family; changing attitudes to sexuality; the attitude of state to the family and its functions.

#### **HIST\*2820 Modern France, 1750-1992: From Louis XV to Mitterrand U (3-0) [0.50]**

This course is a survey of French history from the beginning of modernization in the 18th century to the challenges of the late 20th century. Topics will include the Revolution, the Napoleonic period, social and political transformation in the 19th century, the Great War, the defeat of 1940 and Vichy, and the remarkable changes in French life since the Second World War.

#### **HIST\*2830 The Emergence of Modern Germany 1871-1990 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.

<b>HIST*2850 History of Greece and Rome W (3-0) [0.50]</b>
The history of the Mediterranean World from prehistoric Greece through Classical Greece and Rome to the legalization of Christianity in the Roman Empire in the 4th century.
<b>HIST*2890 History of the Islamic World F (3-0) [0.50]</b>
An introduction to the history of Islam. The course will consider the founding of Islam, its global diffusion, and its role in the transformation of modern societies in the developing world.
<b>HIST*2910 History of Modern Asia W (3-0) [0.50]</b>
An introduction to the histories and cultures of South, Southeast and East Asia since 1750. The course will consider the evolution of Asian religions, cultural identities, concepts of state and of society in the modern era.
<b>HIST*2920 Republican Latin America W (3-0) [0.50]</b>
This course will study selected themes in the history of Latin American republics from the independence period to the modern era.
<b>HIST*2930 Women and Cultural Change F (3-0) [0.50]</b>
Using gender and ethnicity as the main categories of analysis, this course examines the history of women in the broad geographical regions of either South America and the Caribbean or North America. The roles women have played in political, economic and private life will be emphasized.
<b>HIST*2960 Topics in the History of Slavery U (3-0) [0.50]</b>
This course introduces students to slavery and the slave trades of the societies of the Atlantic Rim during the era of the Atlantic slave trade. The African experience of the trade constitutes a major focus, but the course also examines aspects of the Atlantic and the trans-Saharan slave trades as they affected societies on the other side of the Atlantic and in the Islamic Middle East. The course also examines the disputed links between the Atlantic slave trade and the rise of capitalism on the one hand and underdevelopment on the other.
<b>HIST*3010 Political Culture in Britain, 1455-1689 U (3-0) [0.50]</b>
An assessment of the transformation of British ideals of monarchy from the Wars of the Roses to the Glorious Revolution. The course will examine the changes in political thought in early modern Britain that emerged as a result of the Renaissance, Reformations, and Scientific Revolution.
<i>Prerequisite(s):</i> 4.50 credits including HIST*1010 or HIST*2000
<b>HIST*3020 Sexuality and Gender in History U (3-0) [0.50]</b>
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. (Also offered through distance education format.)
<i>Prerequisite(s):</i> 4.50 credits
<b>HIST*3030 Celtic Britain and Ireland to 1066 U (3-0) [0.50]</b>
The social, political and cultural history of the Celtic peoples of the British Isles from Prehistory to the advent of the Normans. Special consideration will be given to the development of Celtic institutions as well as to comparative study of successive waves of invaders-Romans, Anglo-Saxons, Vikings and Normans.
<i>Prerequisite(s):</i> 4.50 credits including HIST*2000
<b>HIST*3060 American Society U (3-0) [0.50]</b>
A study of selected aspects of American society focusing on the 19th and 20th Centuries. Specific topics, which will vary according to the expertise of the instructor, may include such themes as War and American society, the Jacksonian Era, Civil War America, or American popular culture.
<i>Prerequisite(s):</i> 4.50 credits including HIST*2150 or HIST*2650
<b>HIST*3070 Modern South Asia U (3-0) [0.50]</b>
This course studies the history of modern South Asia from 1757 to the present day. Possible topics include: ideologies of British power in South Asia, Indian reactions to imperialism, socio-religious movements, the birth of nationalism and the nation-state in South Asia, civil society and social issues in a developing nation, regionalism, foreign policy and South Asia's place in the 21 <sup>st</sup> century.
<i>Prerequisite(s):</i> 4.50 credits including HIST*2910 or HIST*3590
<b>HIST*3080 United States in the World U (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 4.50 credits including HIST*2650

<b>HIST*3090 Nationalism and Internationalism in Europe 1914-1957 U (3-0) [0.50]</b>
This course will be concerned with two main themes of 20th-century European history: the impact of nationalism and the gradual emergence of international ideas and institutions. Major topics to be discussed include nationalism during the two world wars, the strengths and weaknesses of the League of Nations, and the creation of the European Economic Community.
<i>Prerequisite(s):</i> 4.50 credits including HIST*2510
<b>HIST*3130 Popular Culture and Punishment, 1700-1900 U (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 4.50 credits including HIST*1010 or SOC*1500
<b>HIST*3140 Witch-hunts and Popular Culture S (0-0) [0.50]</b>
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 doing so it will provide students with a background on the history of Scotland during the early modern period and introduce them to the considerable body of historical writing on the subject of the witch-hunts. In addition, students will explore notions of both elite culture and the 'popular culture' of those elements of society frequently neglected by historians. Due to the fact that the overwhelming majority of the accused witches were women, the course will include examinations of gender history and its contributions to our understandings of the period. (Offered through distance education format only.)
<i>Prerequisite(s):</i> 4.50 credits including HIST*1010. Instructor consent required.
<b>HIST*3150 History and Culture of Mexico U (3-0) [0.50]</b>
This course will cover the history and culture of Mexico from its Precolumbian civilizations to the present. Topics may include: Aztec and Maya civilizations, European discovery and conquest, inquisition, convents, independence, the Mexican Revolution, indigenismo, NAFTA and Zapatista insurgency in Chiapas.
<i>Prerequisite(s):</i> 4.50 credits including 1 of HIST*2110, HIST*2920, HIST*2930
<b>HIST*3160 Canadian Political History Since 1867 U (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 4.50 credits including 1 of HIST*2100, HIST*2600, HIST*2601/2
<b>HIST*3270 Revolution in the Modern World W (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 4.50 credits
<b>HIST*3310 Disease and History U (3-0) [0.50]</b>
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. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 4.50 credits
<b>HIST*3380 British Imperialism in Asia and Africa U (3-0) [0.50]</b>
This course examines the British Empire from the 18 <sup>th</sup> through the 20 <sup>th</sup> centuries. It focuses on: the empire in Asia and Africa; ideologies of empire; and European and non-European approaches and reactions to empire.
<i>Prerequisite(s):</i> 4.50 credits including HIST*2500 or HIST*2510
<b>HIST*3410 The History of Pre-Colonial Africa U (3-0) [0.50]</b>
This course will include studies on the Ibo, Yoruba and Edo societies, and on the Dahomey, Hausa, Western Congo and Angola states; the effect of the Atlantic slave trade on African societies. Emphasis will be given to the householding system, lineage group organization, subsistence agriculture, and the sources of African History.
<i>Prerequisite(s):</i> 4.50 credits including HIST*1150 or HIST*2960

**HIST\*3420 Colonial Latin America F (3-0) [0.50]**

This course covers the history of Latin America from the pre-Columbian period to age of independence in the early nineteenth century. Topics include pre-Columbian civilizations; the European conquest; the development of colonial societies and politics; the growth of slavery; eighteenth-century imperial reform, and the rise of independence movements. (Offered in even-numbered years.)

*Prerequisite(s):* 4.50 credits

**HIST\*3430 Topics in Environment and Society U (3-0) [0.50]**

This is a topical course, which builds on themes introduced in HIST\*2250, Environment and History. Topics may include global deforestation; the origins of the global environmental movement; agriculture and the environment; the environmental impact of cultural encounters.

*Prerequisite(s):* 4.50 credits including HIST\*2250

**HIST\*3450 The Public Face of History U (2-1) [0.50]**

Critical analysis of public history and memory through the activities of governments and voluntary associations. History as presented in films, television, schools, museums, archives, commemorations, historical fiction, or popular non-fiction is examined.

*Prerequisite(s):* 4.50 credits including HIST\*2450

**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.

**HIST\*3480 Workplace Learning U (0-0) [0.50]**

An independent study course based on either History related voluntary or paid workplace experience. Evaluation will be based on assignments relating to work duties. These 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.

**HIST\*3530 Celtic Britain and Ireland Since 1603 U (3-0) [0.50]**

This course will deal with the Celtic peoples in the British Isles and their effort to maintain their cultural, economic and political independence.

*Prerequisite(s):* 4.50 credits including 1 of HIST\*2000, HIST\*2500, HIST\*3030

**HIST\*3540 World War Two U (3-0) [0.50]**

An in-depth analysis of the immediate causes and impact of the Second World War focusing on the influence of military events, on the social, political and economic developments of the major participating nations.

*Prerequisite(s):* 4.50 credits including 2 of HIST\*1150, HIST\*2040, HIST\*2100, HIST\*2500, HIST\*2510, HIST\*2601/2, HIST\*2600, HIST\*2650, HIST\*2830,

**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):* 4.50 credits including 1 of HIST\*2500, HIST\*2510, HIST\*2800, HIST\*2930

**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):* 4.50 credits including 1 of HIST\*1150, HIST\*2800, HIST\*2890, HIST\*2910, HIST\*2930

**HIST\*3590 Culture and Society in South Asia F (3-0) [0.50]**

This course examines South Asian history 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 South Asian 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):* 4.50 credits

**HIST\*3600 Quebec History U (3-0) [0.50]**

Examines selected themes in the social, economic, political and cultural evolution of Quebec and its relations with the rest of Canada.

*Prerequisite(s):* 4.50 credits including 1 of HIST\*2100, HIST\*2600, HIST\*2601/2

**HIST\*3650 Twentieth-Century America U (3-0) [0.50]**

This course examines political and social changes in the United States during the latter decades of the 20<sup>th</sup> century and into the 21<sup>st</sup>. America's international role will be considered, as well as conflicts over such issues as 'race', ethnicity, gender, and culture.

*Prerequisite(s):* 4.50 credits including HIST\*2650

**HIST\*3660 Canadian Social History U (3-0) [0.50]**

An examination of 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):* 4.50 credits including 1 of HIST\*2100, HIST\*2600, HIST\*2601/2

**HIST\*3750 The Reformation U (3-0) [0.50]**

The changes in religious, social and cultural life in 16th century Europe. 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):* 4.50 credits including HIST\*1010

**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):* 4.50 credits

**HIST\*3910 Africa Since 1800 U (3-0) [0.50]**

This course will trace the suppression of the slave trade and the opening of Africa to European imperialism. Emphasis will be given to resistance movements and rising nationalism between the two World Wars. An endeavour will be made to relate the national liberation movement to the achievement of independence.

*Prerequisite(s):* 4.50 credits including HIST\*1150 or HIST\*2960

**HIST\*4030 Historical Biography U (3-0) [0.50]**

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.

**HIST\*4040 Topics in Scottish History U (3-0) [0.50]**

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 HIST\*3530

*Restriction(s):* Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**HIST\*4050 Topics in Scottish History U (3-0) [0.50]**

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 HIST\*3530

*Restriction(s):* Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**HIST\*4090 Modern European History U (3-0) [0.50]**

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\*3090

*Restriction(s):* Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**HIST\*4100 Africa and the Slave Trades U (3-0) [0.50]**

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, and abolition and the introduction of legitimate commerce and their impact on Africa. (H)

*Prerequisite(s):* 10.00 credits including 1 of 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.

**HIST\*4120 Topics in Global History U (3-0) [0.50]**

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.

**HIST\*4160 Seminar in Canadian Political History U (3-0) [0.50]**

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 1 of HIST\*2100, HIST\*2600, 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.

**HIST\*4180 American Identities U (3-0) [0.50]**

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\*2650  
*Restriction(s):* HIST\*4210, restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**HIST\*4190 The American South U (3-0) [0.50]**

A study of the slave south from colonial times to the Civil War, this course will concentrate on the evolution of the plantation system and slave society, the growth of a distinctive south civilization, and the immediate causes of the Civil War. (H)

*Prerequisite(s):* 10.00 credits including HIST\*2150 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.

**HIST\*4220 Canadian Cultural Identity U (3-0) [0.50]**

This seminar examines the origins, major themes, and historical development of Canadians' cultural identities. Possible topics include anti-Americanism, loyalism, multiculturalism, official bilingualism, mass culture, tourism, folklore, and state cultural policies. (H)

*Prerequisite(s):* 10.00 credits including 1 of HIST\*2100, HIST\*2600, 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.

**HIST\*4280 Poverty and Policy in the Victorian Age U (3-0) [0.50]**

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.

**HIST\*4450 History with Numbers F (3-0) [0.50]**

This course surveys the use of quantitative methods, the historical evolution of data generation and recording, and the use of quantitative sources in historical analysis and evidence in historical research. The principal objective is to build numeracy among senior History students. Case studies and example will be drawn from studies of inequality, family structure and migration from a variety of regions in Europe, Asia, Africa and the Americans. (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.

**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.

**HIST\*4560 Topics in Revolution U (3-0) [0.50]**

A seminar course designed to explore one or more social or political or intellectual revolutions in the early modern or modern era depending on the expertise of the instructor. Students should consult the department for specific offerings. (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.

**HIST\*4570 Topics in Revolution U (3-0) [0.50]**

A seminar course designed to explore one or more social or political or intellectual revolutions in the early modern or modern era depending on the expertise of the instructor. Students should consult the department for specific offerings. (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.

**HIST\*4580 Topics in Revolution U (3-0) [0.50]**

A seminar course designed to explore one or more social or political or intellectual revolutions in the early modern or modern era depending on the expertise of the instructor. Students should consult the department for specific offerings. (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.

**HIST\*4620 Seminar in Canadian Rural History U (3-0) [0.50]**

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 1 of HIST\*2100, HIST\*2600, 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.

**HIST\*4670 Seminar in Science and Society W (3-0) [0.50]**

This course will discuss the way science is rooted in society and culture. It will explore the broad field of the history of science, the social role of the scientist, the impact of scientific methods, technology, machines and networks. Students will emerge with the ability to grapple with many of the challenges involved in rethinking the history of science in social and cultural terms. (H)

*Prerequisite(s):* 10.00 credits including either HIST\*1250 or ASCI\*1000  
*Restriction(s):* Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**HIST\*4680 The U.S. in the Era of Urbanization, 1870-1920 U (1-2) [0.50]**

This course will examine social and intellectual developments in the United States with emphasis placed on the period between the Civil War and World War I. An important area of study will be the nature and consequences of urban development. Stress is laid on the reading of primary sources. (H)

*Prerequisite(s):* 10.00 credits including HIST\*2150 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.

**HIST\*4700 Topics in Medieval History U (3-0) [0.50]**

A detailed analysis of selected aspects of the Middle Ages from c. 1000. 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.

**HIST\*4710 Topics in Medieval History U (3-0) [0.50]**

A detailed analysis of selected aspects of the Middle Ages from c. 1000. 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.

**HIST\*4900 Imperialism and Nationalism in South Asia U (3-0) [0.50]**

This course will examine India's experience of and reaction to colonial rule from the advent of the British Raj in 1757 through to decolonization in 1947. Emphasis will be placed not only on mainstream political movements, but also on the role played by subaltern groups such as women, peasants and workers. (H)

*Prerequisite(s):* 10.00 credits including 1 of HIST\*2890, HIST\*2910, HIST\*3070, HIST\*3380

*Restriction(s):* Restricted to students in the B.A. Honours program with a minimum of 70% average in all History course attempts.

**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.

## Horticultural Science

### Department of Plant Agriculture

#### **HORT\*1050 Introduction to Horticultural Management F (2-3) [0.50]**

This course is an overview of the various sectors of the horticulture industry and an investigation into specific sectors, that will include field trips, practical hands-on experience with tools and equipment, and safety legislation and practices. Industry sectors such as food and ornamental crop production, greenhouse and nursery production, landscape management, design/build and maintenance contracting, and gardening, will be examined and discussed. The variety breadth and importance of the horticulture industry in Ontario's economy will be outlined and discussed.

*Restriction(s):* Registration in B.B.R.M., Horticulture Major

*Location(s):* Ridgetown

#### **HORT\*1060 Plant Identification: Woody Plants F (3-2) [0.50]**

In this course, students will learn the identification, naming, selection and landscape adaptation of cultivated woody plants. Elements of classification and nomenclature will provide a basis for learning common names, botanic names and morphological terms. Plant habit will be related to landscape function. Discussion will include the diversity of human interactions with woody plants both historically and in modern times. (Also offered through distance education format.)

*Restriction(s):* Registration in B.B.R.M., Horticulture Major, HORT\*3260

*Location(s):* Ridgetown

#### **HORT\*1070 Fruit Production F (2-3) [0.50]**

This course covers the commercial production and management of major small and tree fruit crops grown in Ontario, with the exception of grapes. Discussion topics include site and location selection, cultural management, and economics of fruit crop production in a temperate climate.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*1080 Vegetable Production I F (2-3) [0.50]**

This course includes commercial production and management of field-grown fresh market and processing vegetable crops, with emphasis placed on the major botanical families of vegetable crops grown in Ontario. Topics discussed include cropping systems of the major vegetable crop families, production trends, site selection, seed propagation, transplant production, use of mulches and rowcovers, irrigation techniques, harvesting and post-harvest handling of major vegetable crops including quality parameters, health benefits of vegetables, processing techniques, and marketing.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*1100 Plant Propagation Techniques W (3-2) [0.50]**

This course covers the principles and practices of propagation for horticultural plants. Sexual propagation discussions include dormancy issues, collection, viability tests, storage and seed germination. Vegetative propagation discussions include cuttings, division, layering, budding, grafting and tissue culture.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*1200 Vegetable Production II W (2-3) [0.50]**

This course includes commercial production and management of field-grown fresh market and processing vegetable crops not covered in Vegetable Production I, with some emphasis placed on production practices and quality characteristics specific to minor vegetable crops. Topics include cropping systems for minor vegetable crops, physiological bases for cultural practices, grading of vegetable crops, nutrient requirements and legislation, major costs associated with vegetable production, harvesting and post-harvest handling of minor vegetable crops including quality parameters, organic production, and marketing challenges for vegetables.

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*2010 Greenhouse Management F (3-2) [0.50]**

This course covers management of the greenhouse environment including temperature, relative humidity, CO<sub>2</sub> and light. Computer controls, pest management, crop culture, containers, mixes, greenhouse heat loss calculations, construction, fertility, diagnostics, post-harvest, etc. are also examined. Students will be required to have a detailed understanding of the theoretical aspects of greenhouse management including physiological, morphological, anatomical, and bio-chemical aspects of greenhouse crops. (First offering is Fall 2007.)

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*2060 Plant Identification: Herbaceous Plants F (3-2) [0.50]**

This course covers the identification, naming, selection and landscape accommodation of families and groups of herbaceous plants with ornamental importance. The course will explore further the nomenclature of ornamental plants through the horticulturally significant taxonomic categories cultivar-group and cultivar-series. (First offering is Fall 2007.)

*Prerequisite(s):* HORT\*1060

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*2080 Horticultural Weed Science F (3-2) [0.50]**

This course will provide the students with hands-on training of the basic anatomical elements and biology of weeds commonly found in ornamental horticulture, as well as applied knowledge methods of weed control, herbicide mode of action, and basis of selectivity. (First offering is Fall 2007.)

*Prerequisite(s):* BIOL\*1030

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **HORT\*2200 Integrated Project W (2-3) [0.50]**

A comprehensive study of the technical and economic aspects of a business operation will be undertaken. This will include the development of a general business plan in a sector of interest to the student, incorporating basic product information and a detailed definition of the business or aspect of the discipline. (First offering is Winter 2008.)

*Prerequisite(s):* AGEC\*1100, AGEC\*2220

*Co-requisite(s):* AGEC\*2230

*Restriction(s):* Registered in B.B.R.M.

*Location(s):* Ridgetown

#### **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 interiorscape settings. (Offered in odd-numbered years.)

*Prerequisite(s):* 0.50 credits in botany

#### **HORT\*3220 Turf Management F (3-0) [0.50]**

Principles and practices of turf production and management of all aspects of the turf industry including golf courses, athletic fields, parks, roadsides, reclamation sites and nursery sod production.

*Prerequisite(s):* 0.50 credits in botany

#### **HORT\*3230 Plant Propagation F (2-2) [0.50]**

Principles and practices of propagation for horticultural plants. Sexual (seed) propagation to include seed maturation, dormancy and seed germination; vegetative (asexual) propagation, including division, layering, budding, grafting and tissue culture.

*Prerequisite(s):* BIOL\*1040

#### **HORT\*3260 Woody Plants F (1-3) [0.50]**

Identification and cultural adaptation of native and introduced woody plants useful in cultivated landscapes and natural areas.

*Prerequisite(s):* BIOL\*1030

#### **HORT\*3280 Greenhouse Production W (3-3) [0.50]**

Principles and practices of production, culture and marketing of greenhouse flower and vegetable crops.

*Prerequisite(s):* BOT\*3310 or PBIO\*3110

#### **HORT\*3340 Culture of Plants W (3-2) [0.50]**

Site preparation, plant establishment and culture of plants in various landscape settings. The course will examine the problems of disturbed planting sites, urban environment and the culture of plants in high traffic areas. Arboricultural cultivation and maintenance of woody plants with practical application will be discussed.

*Prerequisite(s):* BIOL\*1040 or equivalent

#### **HORT\*3350 Woody Plant Production and Culture W (3-3) [0.50]**

Techniques of producing field and container-grown woody landscape nursery stock are integrated with techniques of planting and maintaining individual trees in the cultivated landscape. This emphasis encompasses nursery stock production and arboriculture.

*Prerequisite(s):* BIOL\*1030 or equivalent

*Equate(s):* HORT\*3340, HORT\*4250

**HORT\*3430 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 (ampelography) 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 integrated with basic wine-making practices and general oenological techniques. (Offered through Distance Education only.)

*Prerequisite(s):* AGR\*2470 or BOT\*2100

**HORT\*3510 Vegetable Production F (3-3) [0.50]**

The vegetable industry and the characteristics, culture, storage and marketing of field-grown vegetable crops will be studied. Organic vegetable production will also be considered.

*Prerequisite(s):* BOT\*2100

**HORT\*4080 Controlled Environment Systems for Plants W (3-3) [0.50]**

An examination of controlled environments, including: commercial greenhouses, plant growth chambers, advanced life support systems for space, urban office towers and other indoor spaces where some form of environment control/management is required. The material presented will address sensor requirements and principles of operation, feedback control requirements and computer-automated systems in plant growth facilities.

*Prerequisite(s):* At least 3.00 credits from BOT, CROP, HORT, PBIO courses including BOT\*2100.

**HORT\*4250 Nursery Production W (2-3) [0.50]**

Methods of production for field and container grown landscape nursery stock including cultural management and merchandising in wholesale and retail operations.

*Prerequisite(s):* 1 of AGR\*2451/2, AGR\*2470, 1.00 credits in horticulture, botany or a related field.

**HORT\*4300 Postharvest Physiology W (3-3) [0.50]**

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.

*Prerequisite(s):* BOT\*3300 or PBIO\*3110

**HORT\*4380 Tropical and Sub-Tropical Horticultural Crops F (3-0) [0.50]**

Principles involved in the production and utilization of tropical and sub-tropical horticultural crops and agroforestry. (Offered in odd-numbered years.)

*Prerequisite(s):* AGR\*1101/2 or AGR\*1250

**HORT\*4420 Fruit Crops F (3-3) [0.50]**

Growth patterns, fruiting characteristics and adaptation to environmental conditions of fruit crops in temperate regions. Classification, cultural practices including propagation and the physiological principles underlying these practices will be emphasized.

*Prerequisite(s):* BOT\*2100

**HORT\*4900 Plant Agriculture Special Project I S,F,W (1-5) [0.50]**

The student, in consultation with a faculty member, will select and define a research problem. Supervisory arrangements should be made at least one semester prior to commencing the course. The course will include preparation of a detailed literature review, project proposal and progress report. This course may be followed by HORT\*4910 to provide two semesters for completion of the project.

*Prerequisite(s):* 15.00 credits

*Restriction(s):* Registration in B.Sc. or B.Sc.(Agr.) program.

**HORT\*4910 Plant Agriculture Special Project II S,F,W (1-5) [0.50]**

A continuation of HORT\*4900 in which the student will complete the research, write up the research findings in a scholarly scientific style and present a seminar.

*Prerequisite(s):* HORT\*4900

## Hospitality and Tourism Management

### School of Hospitality and Tourism Management

#### HTM\*1000 Introduction to Hospitality and Tourism Management F (3-0) [0.50]

A survey of the hospitality and tourism industry, with reference to its historical development, growth, organization; the management process, and the scope of the industry today.

*Equate(s):* HAFA\*1000

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2000 Hospitality and Tourism Purchasing Management W (3-0) [0.50]

The management of the purchasing function in hospitality and tourism businesses as it applies to food, beverages, supplies, equipment, furnishings and services. The focus is on the process of managing the supply channel as well as on developing appropriate policies and procedures.

*Prerequisite(s):* 1 of HAFA\*1000 , HTM\*1000, (ECON\*1050, HAFA\*2700 ), (ECON\*1050, HTM\*2700)

*Equate(s):* HAFA\*2000

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2010 Hospitality and Tourism Business Communications F,W (3-0) [0.50]

Designed to enhance students' professionalism in the hospitality and tourism fields by improving their communication skills. The focus is primarily on writing (business letters, memos, and reports), but also includes effective speaking/presentation skills. The assignments are based on hospitality and tourism issues.

*Prerequisite(s):* 1 of HAFA\*1000 , HAFA\*2700 , HTM\*1000, HTM\*2700

*Equate(s):* HAFA\*2010

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2030 Control Systems in the Hospitality and Tourism Industry F,W (3-0) [0.50]

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. (Also offered through distance education format.)

*Prerequisite(s):* 1 of HAFA\*2000 , HAFA\*2700 , HTM\*2000, HTM\*2700

*Equate(s):* HAFA\*2030

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management, B.A.Sc. Applied Human Nutrition.

#### HTM\*2050 Dimensions of Tourism F (3-0) [0.50]

The examination of tourism as an amalgam of industries - transportation, accommodation, travel, trade and other facilitating services; follows a multidisciplinary approach in its analysis, organization, planning and control.

*Prerequisite(s):* 5.00 credits

*Equate(s):* HAFA\*3100 and HTM\*3100

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2070 Meetings and Convention Management F (3-0) [0.50]

This course examines the sales, servicing and management of the meetings, events, conventions, exhibitions, and trade show 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 this multifaceted component of the tourism and hospitality industry.

*Prerequisite(s):* HAFA\*1000 or HTM\*1000

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2100 Lodging Operations W (3-0) [0.50]

A study of the nature of unit operations in the various sectors of the lodging industry and of the functions and systems of lodging operations. Topics will include organization structure and responsibilities, sociotechnical systems and legal and security aspects.

*Prerequisite(s):* HAFA\*1000 or HTM\*1000

*Equate(s):* HAFA\*2100

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2120 Hospitality and Tourism Marketing I W (3-0) [0.50]

This course discusses the hospitality and tourism marketing environment in Canada and all elements of the marketing planning process through the use of numerous up-to-date examples from all geographic areas and sectors of the tourism and hospitality industries. Students will gain a comprehensive understanding of the private and public sector stakeholders as well as the contemporary marketing challenges they face.

*Prerequisite(s):* HTM\*1000

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2150 Introduction to Canadian Business Management U (3-0) [0.50]

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. This course may not be taken for credit by Bachelor of Commerce students. (Offered through distance education format only.)

*Equate(s):* HAFA\*2150

*Restriction(s):* B.Comm. students cannot take this course for credit.

#### HTM\*2170 Canadian Tourism Policy, Planning and Development W (3-0) [0.50]

This course focuses on the various aspects of tourism planning, policy, and development in Canada. Topics covered include: reasons for development; tourism development as a strategy for urban revitalization; tourism's links to heritage conservation and regional development; sustainability and the adverse impacts of development; cultural considerations and community participation; and the importance of context for individual tourism projects.

*Prerequisite(s):* GEOG\*1220, HTM\*1000, HTM\*2050

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

#### HTM\*2200 Organizational Behaviour I F,W (3-0) [0.50]

This course introduces organizational behaviour. It focuses on individual perception, learning, communication, motivation and decision-making as well as group effectiveness, problem-solving and decision-making. (Also offered through distance education format.)

*Prerequisite(s):* 5.00 credits

*Equate(s):* HAFA\*2200

*Restriction(s):* ISS\*2500, PSYC\*3080. Priority Access course. Enrolment restricted to particular programs or specializations. See department for more information.

#### HTM\*2700 Introductory Foods F,W (3-2) [0.50]

Scientific principles and their application to food preparation and food consumption. An integrated lecture and laboratory approach is used to study the chemical and physical properties of foods.

*Prerequisite(s):* 1 of Grade 12U Chemistry, OAC Chemistry, CHEM\*1000 , CHEM\*1040, CHEM\*1060, CHEM\*1100

*Equate(s):* HAFA\*2700

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management, B.A.Sc. Applied Human Nutrition.

#### HTM\*2740 Cultural Aspects of Food F (3-0) [0.50]

A survey of cultural influences on individual and group food habits and patterns. The course studies the selection and use of food; the development of food beliefs, attitudes and related behaviours within the context of cultural systems.

*Equate(s):* HAFA\*2740

#### HTM\*3000 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. (Also offered through distance education format.)

*Prerequisite(s):* 1 of AGECE\*2220, FRHD\*3060, HAFA\*2030 , HAFA\*2200 , HTM\*2030, HTM\*2200

*Equate(s):* HAFA\*3000

*Restriction(s):* PSYC\*3070. Priority Access course. Enrolment restricted to particular programs or specializations. See department for more information.

**HTM\*3030 Beverage Management F (2-2) [0.50]**

This course provides students with knowledge of the beer, spirit, wine, coffee and soft drink industries and their importance in the hospitality environment. Course topics will include product characteristics, purchasing, pricing, control, marketing and promotion, trends and the responsible service of alcoholic beverages.

*Prerequisite(s):* 10.00 credits

*Restriction(s):* HAFA\*4180 , HTM\*4180 . Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management. Students must be of legal drinking age in Ontario.

**HTM\*3060 Lodging Management U (3-0) [0.50]**

To explore and analyze the principles and practices of lodging management and related sales activities. The management of and interaction among various divisions of lodging operations are addressed, including general management, front office/housekeeping/engineering divisions, food and beverage operations, sales and marketing, accounting and finance. Focus of the course is on communication both within and among departments, divisions, and most importantly, with the consumer.

*Prerequisite(s):* HAFA\*2100 or HTM\*2100

*Equate(s):* HAFA\*3060

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3070 Hospitality and Tourism Management Accounting F,W (3-0) [0.50]**

Application of accounting principles to hospitality and tourism accounting systems. Emphasizes use of the uniform system of accounts for hospitality and tourism operations, principles of internal control, payroll control, budgeting, responsibility accounting and analysis of financial data. Designed to assist the student in relating accounting information to management decisions. Examples from all industry segments will be used. (Also offered through distance education format.)

*Prerequisite(s):* AGE\*2220, ( HAFA\*2030 or HTM\*2030)

*Equate(s):* HAFA\*3070

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3080 Hospitality and Tourism Marketing II 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. Course content includes marketing strategies and practices, segmentation and target marketing, positioning and branding, pricing, promotions, personal selling, and distribution system decisions for all hospitality and tourism related businesses.

*Prerequisite(s):* HTM\*2120

*Equate(s):* HAFA\*3080

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3090 Foodservice Operations Management F,W (4-6) [1.00]**

The application of managerial functions to foodservice operations with the emphasis on the principles of food production and service in a commercial setting.

*Prerequisite(s):* ( HAFA\*2030 or HTM\*2030), ( HAFA\*2700 or HTM\*2700)

*Equate(s):* HAFA\*3010 , HAFA\*3090 , HAFA\*3091/2

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management, B.A.Sc. Applied Human Nutrition.

**HTM\*3120 Operations Analysis in the Hospitality and Tourism Industry W (3-0) [0.50]**

The analysis of operations in the hospitality and tourism industry with the aim of improving productivity of resources. Specific areas to be studied include the nature of productivity, the use of work study methods, the significance of statistical concepts and the application of operations research techniques.

*Prerequisite(s):* ( HAFA\*2030 or HTM\*2030), STAT\*2060

*Equate(s):* HAFA\*3120

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3150 Experiential Learning in the Hospitality Industry U (3-0) [0.50]**

An independent program of study formally integrating the student's academic study with a concentrated work experience. The study is to be decided by the student in consultation with the supervisory faculty (normally the department's Co-op Co-ordinator) prior to registration in the course.

*Equate(s):* HAFA\*3150

*Restriction(s):* Registration in B.Comm. HAFA Co-op. Instructor consent required.

**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):* 1 of HAFA\*3100 , HTM\*2050, HTM\*3100

*Equate(s):* HAFA\*3160

*Restriction(s):* Registration in B.Comm. Tourism Management.

**HTM\*3180 Casino Operations Management W (0-0) [0.50]**

The application of business principles, techniques and procedures within the casino management environment. 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. Students must be legal age of 19 or over.

*Prerequisite(s):* ( HAFA\*2200 or HTM\*2200) and (1 of AGE\*2230, HAFA\*3070 , HTM\*3070)

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3200 Club Management Operations U (3-0) [0.50]**

This course examines the effective operation and management of private clubs including city clubs, country clubs and athletic clubs. Major topics include: the unique niche that clubs represent in the hospitality industry, the general manager/COO concept, organizational structure of clubs, role of the board of directors, membership requirements, differences between tax-exempt clubs, duties and responsibilities of department heads in private clubs, governmental regulations, preparing for a career in the club field, trends in club management and the future of clubs.

*Prerequisite(s):* 10.00 credits

*Equate(s):* HAFA\*3200

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3250 Tourism in Canada W (3-0) [0.50]**

This course will take an in-depth look at the tourism industry in Canada, including all eight sectors recognized by the Canadian Tourism Human Resources Council. Topics will include interrelationships among sectors; an overview of the development of tourism in Canada; economic, social, cultural and environmental impacts of tourism in Canada; and an examination of the issue of sustainability of tourism in Canada. Emphasis will be placed on existing and emerging tourism products (such as destination tourism, adventure tourism, eco-tourism, and First Nations' based tourism); government policies, initiatives, and funding at all levels from federal to municipal; various industry associations and their activities; educational initiatives; and the future of tourism in Canada.

*Prerequisite(s):* 1 of HAFA\*3100 , HTM\*2050, HTM\*3100

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*3780 Economics of Food Usage W (3-0) [0.50]**

An overview of food supply chain management in the food and foodservice industries. The changing patterns in food production, distribution, legislation and consumption habits affecting the economics and use of food in Canada and globally are investigated.

*Prerequisite(s):* 1 of FOOD\*2010, HAFA\*2700 , HTM\*2700, MCS\*1000

*Equate(s):* COST\*3780 , HAFA\*3780

**HTM\*4050 Wine and Oenology F (2-2) [0.50]**

Provides students with knowledge about the wine industry and will emphasize knowledge about product, purchasing, pricing, and service.

*Prerequisite(s):* 10.00 credits

*Equate(s):* HAFA\*4050

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management. Students must be of legal drinking age in Ontario.

**HTM\*4090 Hospitality and Tourism Facilities Management and Design F,W (3-0) [0.50]**

This course will equip an individual to work as a knowledgeable member of a hospitality or tourism organization's design or re-design team. Efficient and effective space utilization for both front-and-back-of-the-house areas, plus a knowledge of how to read professional drawings ("blueprints") will be covered. This course also will provide an understanding of the operation of a physical plant including such elements as systems maintenance, appropriate use of various materials, energy management, life cycle costing, and safety and security issues.

*Prerequisite(s):* 1 of HAFA\*3090 , HTM\*3090, HAFA\*3091/2

*Equate(s):* HAFA\*4090

*Restriction(s):* Registration in B.Comm. HAFA, HAFA Co-op or Tourism Management.

**HTM\*4100 Organizational Behaviour II F,W (3-0) [0.50]**

This course is concerned with the structure and dynamics of organizational open systems. It focuses on the external environment, technology, structure (and their interrelationships), organizational culture and change management. It addresses the actions that managers must take to insure that behaviour within the organization aids rather than impedes the achievement of overall organizational goals.

*Prerequisite(s):* ( HAF A\*2200 or HTM\*2200), ( HAF A\*3000 or HTM\*3000)

*Equate(s):* HAF A\*4100

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op, Human Resource Management or Tourism Management.

**HTM\*4110 Restaurant Operations U (1-7) [0.50]**

The management and operation of fine dining restaurants, and the study of major cuisines and classical cookery. Analysis of qualitative aspects of the restaurant business (ambience, total service package, and the dynamic relationship between service and the product of food and wine). Emphasis is placed upon creativity and authenticity in menu formulation, operational performance and guest satisfaction.

*Prerequisite(s):* 1 of HAF A\*3090 , HTM\*3090, HAF A\*3091/2

*Equate(s):* HAF A\*4110

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4120 Entrepreneurship in Hospitality and Tourism U (3-0) [0.50]**

This course investigates the development of entrepreneurial and intrapreneurial activities in the context of small business development and ownership in the hospitality and food service industries. Major topics include: entrepreneurship, intrapreneurship, business ownership models, business plan development and specific operating factors that influence success as a small business.

*Prerequisite(s):* 1 of AGE C\*2230, HAF A\*3070 , HTM\*3070

*Equate(s):* HAF A\*4120

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4130 Current Management Topics U (3-0) [0.50]**

Principal operating problems in the hospitality and tourism industry are analyzed and discussed using actual case studies. Students should check with the School of Hospitality and Tourism Management to determine what topic will be offered during specific semesters, and which prerequisites, if any, are appropriate.

*Equate(s):* HAF A\*4130

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4140 Current Management Topics U (3-0) [0.50]**

Principal operating problems in the hospitality and tourism industry are analyzed and discussed using actual case studies. Students should check with the School of Hospitality and Tourism Management to determine what topic will be offered during specific semesters, and which prerequisites, if any, are appropriate.

*Equate(s):* HAF A\*4140

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4150 Current Management Topics U (3-0) [0.50]**

Principal operating problems in the hospitality and tourism industry are analyzed and discussed using actual case studies. Students should check with the School of Hospitality and Tourism Management to determine what topic will be offered during specific semesters, and which prerequisites, if any, are appropriate.

*Equate(s):* HAF A\*4150

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4160 Human Resources Planning W (3-0) [0.50]**

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):* ( HAF A\*2200 or HTM\*2200), ( HAF A\*3000 or HTM\*3000)

*Equate(s):* HAF A\*4160

*Restriction(s):* Registration in B.Comm. Human Resources Management.

**HTM\*4170 International Tourism Development and Management W (3-0) [0.50]**

This course encourages students to develop a cross-cultural awareness of the objectives and issues regarding the development of tourism as well as the trends that shape the various sectors of the hospitality and tourism industry in every region of the world. Students will be introduced to a variety of multinational tourism policies as well as strategic and structural approaches to the development of the industry through readings, case studies and presentations.

*Prerequisite(s):* ( HAF A\*3100 or HTM\*3100 ), ( HAF A\*3160 or HTM\*3160)

*Equate(s):* HAF A\*4170

*Restriction(s):* Registration in B.Comm. Tourism Management.

**HTM\*4190 Hospitality and Tourism Operations Planning F,W (3-0) [0.50]**

The course examines management and organization practices as they are applied to typical hospitality and tourism operational issues. Significant decision points and sub-system interrelationships are emphasized.

*Prerequisite(s):* ( HAF A\*3070 or HTM\*3070), ( HAF A\*3080 or HTM\*3080)

*Co-requisite(s):* AGE C\*3320

*Equate(s):* HAF A\*4190

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4200 Policy Issues in Hospitality and Tourism Management F,W (3-0) [0.50]**

An integrative course intended to draw together the several disciplines in which hospitality and tourism management is based. Conceptual, analytical and decision-making skills will be developed through an extensive exposure to case studies.

*Prerequisite(s):* AGE C\*3320, ( HAF A\*3070 or HTM\*3070), ( HAF A\*3080 or HTM\*3080)

*Equate(s):* HAF A\*4200

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management.

**HTM\*4300 Co-operative Education Seminar F (3-0) [0.50]**

An integration of the students' academic studies with their work semester experiences provided by the co-operative program. Emphasis will be placed on students critically evaluating the application of theoretical concepts in different working environments.

*Prerequisite(s):* Registration in semester 7 of B.Comm. HAF A Co-op.

*Equate(s):* HAF A\*4300

**HTM\*4390 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.

*Prerequisite(s):* 10.00 credits

*Equate(s):* HAF A\*4390

*Restriction(s):* Not available to students registered in B.Comm. HAF A, HAF A Co-op, Human Resources Management or Tourism Management. Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

**HTM\*4500 Special Study in Hospitality and Tourism U (3-0) [0.50]**

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.

*Equate(s):* HAF A\*4500

*Restriction(s):* Registration in B.Comm. HAF A, HAF A Co-op or Tourism Management and instructor consent.

## Human Kinetics

*Department of Human Health and Nutritional Sciences*

### **HK\*2100 Anatomy for Artists W (3-3) [0.50]**

The structure of the human body will be considered in this course. The limitations imposed by bones, joints and muscle will be explored in relation to capacity of the human figure to move and to express emotion. This course has been designed for students registered in the Studio Arts program.

*Prerequisite(s):* SART\*2090

*Restriction(s):* Restricted to Studio Arts majors.

### **HK\*2270 Principles of Human Biomechanics W (3-1) [0.50]**

Application of mechanical principles to the study of human movement. Topics 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):* PHYS\*1000 or PHYS\*1080

### **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\*3100, HK\*3940, ZOO\*3200

*Restriction(s):* Restricted to B.Sc., Major in Human Kinetics or Neuroscience Minor.

### **HK\*3401 Human Anatomy F (2-3) [0.75]**

First part of the two-semester course HK\*3401/2. Refer to HK\*3401/2 for course description.

*Co-requisite(s):* HK\*3940 or instructor consent

*Restriction(s):* Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science. Instructor consent required.

### **HK\*3401/2 Human Anatomy 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. 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\*3940 or instructor consent

*Restriction(s):* Registration in the B.Sc. Major in Human Kinetics or Bio-Medical Science. Instructor consent required

### **HK\*3402 Human Anatomy W (2-3) [0.75]**

Second part of the two-semester course HK\*3401/2. Refer to HK\*3401/2 for course description.

*Prerequisite(s):* HK\*3401

### **HK\*3600 Applied Human Biology F (2-3) [0.75]**

Laboratory techniques which are central to human biology are covered, 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\*3940 or permission of instructor

*Restriction(s):* Registration in the Human Kinetics major.

### **HK\*3940 Human Physiology F (6-0) [1.25]**

This course consists of a series of lectures, demonstrations and tutorials designed for students desiring a knowledge of physiological concepts as they apply to human beings. The course discusses cellular physiology, neurophysiology, endocrinology, and the physiology of the following systems: cardiovascular, renal, gastrointestinal and respiratory with an emphasis on the regulation of function.

*Prerequisite(s):* BIOL\*2210

### **HK\*4070 Clinical Biomechanics F (2-2) [0.50]**

Functional human anatomy and mechanical characteristics of biological tissues at the impairment and repair levels. Pathomechanics of human movement resultant from disease, abuse or trauma. Etiology, testing and correction of functional disorders with special reference to balance, posture, and gait.

*Prerequisite(s):* ENGG\*2660 or (HK\*2270, HK\*3600)

### **HK\*4230 Advanced Study in Human Biology and Nutritional Sciences S,F,W (3-0) [0.50]**

Independent literature research of an approved topic to be decided by the student in consultation with a faculty advisor.

*Prerequisite(s):* 12.00 credits

### **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):* 1 of ENGG\*1210, HK\*3270, (HK\*2270, HK\*3600)

### **HK\*4320 Work Physiology W (3-3) [0.75]**

The adjustments made by the physiological regulatory systems in response to common human activities will be identified and discussed. This will include an examination of limiting factors within each system.

*Prerequisite(s):* HK\*3940 or instructor consent

### **HK\*4360 Research in Human Biology and Nutritional Sciences S,F,W (0-12) [1.00]**

The student will select a research topic and design and complete a project in an area of interest, in consultation with a faculty advisor.

*Prerequisite(s):* 12.00 credits

### **HK\*4371 Research in Human Biology and Nutritional Sciences II S,F,W (0-6) [0.50]**

First part of the two-semester course HK\*4371/2. Refer to HK\*4371/2 for course description.

*Prerequisite(s):* 12.00 credits

### **HK\*4371/2 Research in Human Biology and Nutritional Sciences II S-F,F-W,W-S [1.00]**

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\*4371 in the first semester and HK\*4372 in the second semester. A grade will not be assigned to HK\*4371 until HK\*4372 has been completed.

*Prerequisite(s):* 12.00 credits

### **HK\*4372 Research in Human Biology and Nutritional Sciences II F,W,S (0-6) [0.50]**

Second part of the two-semester course HK\*4371/2. Refer to HK\*4371/2 for course description.

*Prerequisite(s):* HK\*4371

### **HK\*4410 Research Concepts F (3-0) [0.50]**

An introduction to the research process in modern integrative biology and biomedical sciences. The course explores, through lectures, tutorials and practica, the theory and practice of scientific experimentation and communication.

*Prerequisite(s):* 12.00 credits

### **HK\*4420 Research Modules W (3-0) [0.50]**

This course is taught as a series of modules on various research topics that are current in laboratories of the Department of Human Health and Nutritional Sciences and the Department of Biomedical Science.

*Prerequisite(s):* 12.00 credits

### **HK\*4460 Regulation of Human Metabolism W (3-0) [0.50]**

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.

*Prerequisite(s):* HK\*3940, (HK\*4320 or NUTR\*4210) or instructor consent

### **HK\*4540 Cardio-respiratory Laboratory W (1-2) [0.25]**

This lab-based course will provide the student with a knowledge of classical and recent techniques for cardio-respiratory data collection. Cardio-respiratory responses to increased metabolic demand are a major focus. The lab is comprised of regular lab exercises and small group projects.

*Prerequisite(s):* HK\*3940

**HK\*4550 Human Cardio-respiratory Physiology W (4-0) [0.75]**

The central focus 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\*3940, instructor consent

**HK\*4670 Prosthetic Biomechanics W (3-1) [0.50]**

The adaptability of human tissues in response to mechanical stress. Bio-electrical potentials in bone. Joint lubrication. Prosthetic replacement in human skeletal joints and limbs with reference to the associated mechanical design.

*Prerequisite(s):* ENGG\*2660 or HK\*4070

## Humanities

### College of Arts

<b>HUMN*2100 Renaissance Lovers and Fools W (3-0) [0.50]</b>
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 will provide background and context for the plays. Lectures and texts are in English. This course is offered in conjunction with ITAL*2100. (Offered in odd-numbered years.)
<i>Restriction(s):</i> ITAL*2100, ITAL*3280
<b>HUMN*3020 Myth and Fairy Tales in Germany F (3-0) [0.50]</b>
The course explores the role of mythology, fairy tales and legends in late 18th- and 19th-century German literature and culture in the context of socio-political developments. 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), romantic mythology in music, art and literature. Authors may include Goethe, Brothers Grimm, ETA Hoffmann, Wagner. Lectures and texts are English. Students registered in GERM*3020 will meet a fourth hour per week to discuss texts in German. This course is offered in conjunction with GERM*3020. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 5.00 credits
<i>Equate(s):</i> GERM*3020
<i>Restriction(s):</i> GERM*3440 , HUMN*3440
<b>HUMN*3100 London Studies in the Humanities W (2-3) [0.50]</b>
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.
<i>Prerequisite(s):</i> Admission to London Semester.
<b>HUMN*3150 Paris Studies in the Humanities W (2-3) [0.50]</b>
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.
<i>Prerequisite(s):</i> Admission to Paris Semester.
<b>HUMN*3160 Contemporary Latin American Fiction W (3-0) [0.50]</b>
This course will examine, in English, why and how the leading figures, such as Borges, Cortazar, Garcia Marques, Carpentier, Isabel Allende, and Luisa Valenzuela have "made" history, not only in the way they have recreated the Latin American historical reality, but also in the way they have reformed the Hispanic literature. Two lectures per week in English and one seminar per week in Spanish. Final essay and examination will be in English, short presentations and compositions will be in Spanish. Students who select the course under the listing of HUMN*3160 will attend the first two hours. They will write a research essay. (Offered in odd-numbered years.)
<i>Equate(s):</i> SPAN*3160
<b>HUMN*3170 Women, Virtue and Honour in Spanish Drama (In English) F (3-0) [0.50]</b>
This is a topic-oriented course which will study, in English, major Spanish dramas: seventeenth-century works such as Lope de Vega's Fuenteovejuna, Calderon's Life is a Dream, Tirso de Molina's Don Juan, and twentieth-century plays such as Garcia Forca's The House of Bernarda Alba and Blood Wedding. In addition to the thematic focus, these texts will be studied for their artistic merit and for the specificity of the Spanish "comedia". Where appropriate, this course will also discuss the influence of Spanish themes on the European culture. Students who select the course under the listing of SPAN*3170 will do selected readings and assignments in Spanish.
<i>Equate(s):</i> SPAN*3170
<b>HUMN*3210 Introduction to Polish History and Culture F (6-4) [1.00]</b>
The core course for the Krakow Semester consisting of three major components: 1) Polish language training, 2) a general introduction to Polish geography, politics and contemporary life and, 3) Polish history and the arts. For Krakow Semester students only.
<i>Prerequisite(s):</i> Admission to Krakow Semester.
<b>HUMN*3220 Krakow Studies in the Humanities I F (3-2) [0.50]</b>
An integrated course of studies in the humanities as they relate to the resources of Krakow, Poland. For Krakow Semester students only.
<i>Prerequisite(s):</i> Admission to the Krakow Semester.
<b>HUMN*3230 Krakow Studies in the Humanities II F (3-2) [0.50]</b>
An integrated course of studies in the humanities as they relate to the resources of Krakow, Poland. For Krakow Semester students only.
<i>Prerequisite(s):</i> Admission to the Krakow Semester.

<b>HUMN*3240 India Studies in the Humanities W (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> Admission to the India Semester.
<b>HUMN*3300 Latin American Studies in the Humanities W (1-2) [0.50]</b>
An integrated course of studies in the humanities as they relate to the resources of Latin America.
<i>Prerequisite(s):</i> Admission to the Latin America semester, consent of the instructor and satisfactory participation in a bi-weekly preparation seminar during the fall semester.
<b>HUMN*3420 Late 18th-and 19th-Century Drama W (3-0) [0.50]</b>
German-language drama from ca. 1780 to ca. 1900 within a European context, including enlightenment, revolutionary and naturalist drama. Texts are read in English. Students who want a German credit must be registered in GERM*3420. Lectures are in English and the laboratory is conducted in German. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 5.00 credits
<i>Equate(s):</i> GERM*3420
<b>HUMN*3430 Tradition and Innovation in 20th-Century Drama W (3-0) [0.50]</b>
Trends, themes and theories in 20th-century German-language drama, with particular focus on significant innovations (e.g. expressionist drama, Brecht's epic theatre. Texts are read and discussed in English. Students who wish for a German credit must register for GERM*3430. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> 5.00 credits
<i>Equate(s):</i> GERM*3430
<b>HUMN*3450 20th Century German Literature and Film F (3-0) [0.50]</b>
This course considers significant social, political, and artistic events and movements of the 20th century in German-speaking countries as reflected in film and literature. Topics may include fin de siècle, expressionism, decadence, gender relations, National Socialism, holocaust, GDR, war, post-war society. Filmmakers may include R. W. Fassbinder, S. Kubrik, F. Lang, L. Visconti, V. Schlöndorff. Authors may include T. Mann, F. Kafka, C. Wolff, H. Hesse. Lectures and texts are in English. Students who wish for a German credit must register for GERM*3450. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> 5.00 credits
<i>Equate(s):</i> GERM*3450
<b>HUMN*3501 Independent Interdisciplinary Research Project F (3-0) [0.50]</b>
First part of the two-semester course HUMN*3501/2. Refer to HUMN*3501/2 for course description.
<i>Restriction(s):</i> Instructor consent required.
<b>HUMN*3501/2 Independent Interdisciplinary Research Project F-W [1.00]</b>
A two-semester course designed for students enrolled in the B.A. program in 1 of the College of Arts disciplines. Students in a general program with no major must seek the approval of the B.A. program counsellor. Students will prepare proposals for independent research projects spanning 2 or more disciplines, at least 1 of which must be from the College of Arts, and arrange for faculty members representing at least 2 of these disciplines to provide supervision. Projects are subject to the approval of the department(s) or school(s) concerned and must be submitted to the appropriate chair(s) or director(s) by the end of the course selection period prior to beginning the course. Subject to approval, this course may be accepted as credit towards an honours major in Art History, Drama, English, Studio Art, French, History, German, Italian, Spanish, Classical Languages, Classical Studies, Music and Philosophy. This is a two-semester course offered over consecutive semesters. When you select it you must select HUMN*3501 in the Fall semester and HUMN*3502 in the Winter semester. A grade will not be assigned to HUMN*3501 until HUMN*3502 has been completed.
<b>HUMN*3502 Independent Interdisciplinary Research Project W (3-0) [0.50]</b>
Second part of the two-semester course HUMN*3501/2. Refer to HUMN*3501/2 for course description.
<b>HUMN*4170 Don Quixote and the Picaresque Novel (In English) F (3-0) [0.50]</b>
This course will study, in English, the importance of this Spanish masterpiece in the development of the modern European novel, and it will examine the first European picaresque work, Lazarillo de Tormes, in the light of the picaresque tradition which followed in Europe and the Americas. The course will also concentrate on the notion of play and laughter (Bakhtin) as means of survival. Students who select the course under the listing of SPAN*4170 will do selected readings and assignments in Spanish.
<i>Equate(s):</i> SPAN*4170

## Interdisciplinary Physical Science

<b>IPS*4001 Chemical Physics Research Project F (0-9) [0.75]</b>	
First part of the two-semester course IPS*4001/2. Refer to IPS*4001/2 for course description.	
<i>Prerequisite(s):</i>	(CHEM*3870 or CHEM*4880), PHYS*3100 (of which CHEM*3870 may be taken concurrently)
<i>Restriction(s):</i>	Instructor consent required.
<b>IPS*4001/2 Chemical Physics Research Project F-W [1.50]</b>	
A two-semester research project supervised by a faculty member from Physics or from Chemistry and Biochemistry, or by a pair of faculty members spanning the 2 departments in order to expand cross disciplinary opportunities. Students will participate in the seminar and reporting activities of either CHEM*4900, CHEM*4910 or PHYS*4500, PHYS*4510, and may utilize modules from PHYS*4500 as preparation if necessary. This is a two-semester course offered over consecutive semesters. When you select it you must select IPS*4001 in the Fall and IPS*4002 in the Winter semester. A grade will not be assigned to IPS*4001 until IPS*4002 has been completed.	
<i>Prerequisite(s):</i>	(CHEM*3870 or CHEM*4880), PHYS*3100 (of which CHEM*3870 may be taken concurrently)
<i>Restriction(s):</i>	Instructor consent required.
<b>IPS*4002 Chemical Physics Research Project W (0-9) [0.75]</b>	
Second part of the two-semester course IPS*4001/2. Refer to IPS*4001/2 for course description.	
<i>Prerequisite(s):</i>	IPS*4001

## 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 of Political Science.

#### **ISS\*2500 Management in Organizations W (3-0) [0.50]**

A first course in management designed to consider the management of any organization whether profit-motivated or non-profit, private or public, from the perspective of the social sciences. School of Hospitality and Tourism Management.

*Restriction(s):* HTM\*2200

#### **ISS\*2990 Introduction to Marx W (3-0) [0.50]**

An interdisciplinary course designed to acquaint students with the thought of Karl Marx. Departments of History, Philosophy, Political Science and Sociology and Anthropology.

#### **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.

#### **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.

#### **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.

#### **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 Krakow Semester.

#### **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.

#### **ISS\*3300 Latin American Studies in the Social Sciences W (1-2) [0.50]**

An integrated course of studies in the social sciences as they relate to the resources of Latin America.

*Restriction(s):* Admission to the Latin America semester, consent of the instructor and satisfactory participation in a bi-weekly preparation seminar during the fall semester.

#### **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. Department of Sociology and Anthropology and Department of Political Science.

*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.

#### **ISS\*4000 Research Project in Environmental Studies F,W (3-0) [0.50]**

This course is required of all senior students in the Environmental Studies Minor. It provides an opportunity to formulate and investigate an issue of environmental concern from an integrative human and biophysical perspective. Students must consult with the Environmental Studies co-ordinator before course selection. Department of Geography.

*Restriction(s):* Registration in the Environmental Studies minor and 4.00 credits in the minor.

## Interdisciplinary University

UNIV\*3500 , UNIV\*3550 and UNIV\*4500 are re-numbered and now appear under Environmental Design and Rural Development (EDRD)

### UNIV\*1200 First Year Seminar 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 fulfil 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.

### 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.

*Restriction(s):* Instructor consent required and acceptance in the Peer Helper program.

### 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 and Career Services for more information.

*Prerequisite(s):* UNIV\*1250

### UNIV\*2000 Foundations of Leadership 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.

*Restriction(s):* Instructor consent required.

### UNIV\*2050 Environmental Perspectives and Human Choices I F (3-0) [0.50]

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. (Offered through distance education format only.)

### 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

### 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

### UNIV\*3010 University Studies in London I S (3-0) [0.50]

An intensive and integrated course of study in the arts, social sciences and/or sciences as they relate to the resources of London. For London Summer Session students only.

*Prerequisite(s):* Admission to the London Summer Session.

### UNIV\*3020 University Studies in London II S (3-0) [0.50]

An intensive and integrated course of study in the arts, social sciences and/or sciences as they relate to the resources of London. For London Summer Session students only.

*Prerequisite(s):* Admission to the London Summer Session.

### UNIV\*3150 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.

### UNIV\*3160 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.

### UNIV\*3170 University Studies in Paris III 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.

### UNIV\*3250 Environmental Perspectives and Human Choices II W (3-0) [0.50]

The complexity and dimensions of key environmental issues introduced in UNIV\*2050 are explored in greater detail. This will facilitate the student's ability to critically evaluate socio-economic-environmental linkages between contemporary challenges such as sustainable resources, energy, human population, education and communication, and environmental ethics. Supplementary voluntary workshop. (Offered through distance education format only.)

*Prerequisite(s):* UNIV\*2050

### UNIV\*4000 Leadership Capstone W (3-0) [0.50]

Changes taking place in organizations and work, and the advanced level, general skills needed by university graduates in the workplace will be explored. In addition, transition issues, such as the change from the role of 'student' to 'employee' or 'entrepreneur', will be examined. Based on experience in their leadership placements, students will examine the relationships between leadership theory and practice. Students will be encouraged to study leadership issues that relate to professions in the disciplines. They will work on an action project that will involve researching creative approaches to leadership issues. This is a required course for the Certification Leadership.

*Prerequisite(s):* UNIV\*2000 plus 120 hours of placement experience.

*Restriction(s):* Instructor consent required.

## Integrative Biology

### **IBIO\*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

*Restriction(s):* ZOO\*4390 , ZOO\*4560

### **IBIO\*4500 Research in Integrative Biology I F,W (1-5) [0.75]**

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.

*Equate(s):* ZOO\*4490 , ZOO\*4500 , BOT\*4820

*Restriction(s):* Normally a minimum cumulative average of 70% in the biology courses during the first 6 semesters of a major in the College of Biological Science. Instructor consent required.

### **IBIO\*4510 Research in Integrative Biology II F,W (1-5) [0.75]**

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

*Equate(s):* ZOO\*4510 , BOT\*4830

*Restriction(s):* Normally a minimum cumulative average of 70% in the biology courses during the first 6 semesters of a major in the College of Biological Science. Instructor consent required.

## International Development

### IDEV\*2010 International Development Studies W (3-0) [0.50]

An introduction to a broad range of topics in international development as studied by various researchers and from perspectives of different social-science disciplines. Special emphasis will be placed on research arising from the seven areas of emphasis in the undergraduate CIDS 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. Students who do not have the stated prerequisites may seek approval from the faculty advisor for International Development to enroll.

*Prerequisite(s):* (ANTH\*1150 or ECON\*1050), (POLS\*2080 or ENVS\*2010)

*Restriction(s):* Registration in the International Development major, minor or area of concentration or in the Development & Stewardship area of concentration for B.Sc.(Env.) or in the International Trade and Development area of emphasis for B.A.APEC.

### IDEV\*3010 Case Studies in International Development W (3-0) [0.50]

An in-depth examination of select case studies in international development.

*Prerequisite(s):* 10.00 credits including IDEV\*2010

*Restriction(s):* Registration in B.A. International Development major. 68% average in all course attempts in the International Development core.

### IDEV\*3200 Individual Work/Study in International Development S,F,W (3-0) [0.50]

This course is intended for students who seek to combine work and study in development with their academic course work. It may be used in connection with internships or work at international development agencies or other appropriate businesses and organizations (in Canada and abroad), for research and/or experience in a developing country, or for other practica or programs. Any faculty member at the University of Guelph with appropriate expertise may supervise the work/study project. In each case, the student and faculty member will agree on an outline of the work/study project and evaluation criteria. In all cases the project will involve a writing component.

*Prerequisite(s):* 10.00 credits

*Restriction(s):* Written approval of the faculty advisor for International Development.

### 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

*Restriction(s):* Written approval of the faculty advisor for International Development.

### 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):* Written approval of the faculty advisor for International Development.

### IDEV\*4500 International Development Seminar F,W (3-0) [0.75]

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. 68% average in all course attempts in the International Development core. Written approval of the faculty advisor for International Development.

## 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.*

<b>ITAL*1060 Introductory Italian I F (3-1) [0.50]</b>
A beginning course in Italian providing the fundamentals of grammar, structure and idiom. Introduction to aspects of Italian life and culture through audio-visual aids. (This course may not be taken by students who have credit for OAC Italian or equivalent.)
<b>ITAL*1070 Introductory Italian II W (3-1) [0.50]</b>
A continuation of ITAL*1060. In addition to basic grammar and composition, readings from modern writers are introduced. (This course may not be taken by students who have OAC Italian or equivalent.)
<b>ITAL*2060 Intermediate Italian I F (3-0) [0.50]</b>
Italian grammar and syntax, composition and translation. <i>Prerequisite(s):</i> ITAL*1070 or OAC Italian
<b>ITAL*2070 Intermediate Italian II W (3-0) [0.50]</b>
Continuation of ITAL*2060. Increased emphasis on composition and translation.
<b>ITAL*2100 Renaissance Lovers and Fools W (3-1) [0.50]</b>
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 will provide background and context for the plays. Lectures and texts are in English. Students registered in ITAL*2100 will meet a fourth hour per week to discuss texts in Italian. This course is offered in conjunction with HUMN*2100. (Offered in odd-numbered years.)  <i>Prerequisite(s):</i> ITAL*1070 or permission of instructor <i>Restriction(s):</i> ITAL*3280 , HUMN*2100
<b>ITAL*3060 Advanced Italian F (3-0) [0.50]</b>
A seminar course in Italian grammar and syntax, composition and translation. (Offered in odd-numbered years.) <i>Prerequisite(s):</i> ITAL*2070
<b>ITAL*3150 Medieval Italian Literature F (3-0) [0.50]</b>
A study of Dante, Petrarch, and Boccaccio. (Offered in even-numbered years.) <i>Prerequisite(s):</i> ITAL*2070
<b>ITAL*3200 Novels of Resistance W (3-0) [0.50]</b>
In this course, students will read Italian novels such as Alberto Moravia's "Gli indifferenti", Italo Calvino's "Il sentiero dei nidi di ragno", and Dacia Maraini's "Donna in guerra" with particular attention to the theme of resistance. The course will consider representations of fascism, patriarchy, and the bourgeois ethos and the ways in which writers envision the possibility of resistance to them. (Offered in even-numbered years.) (First offering is Winter 2008.)  <i>Prerequisite(s):</i> ITAL*2070 or permission of instructor <i>Restriction(s):</i> ITAL*2350
<b>ITAL*3950 Topics in Italian Literature F,W (3-0) [0.50]</b>
Aspects of Italian literature. Each offering will treat a particular topic such as early texts in the Vernacular, Commedia dell'Arte, Eighteenth-Century Drama, realism in Italian Literature, the poetry of Montale, Ungaretti, and Saba. (Offered in even-numbered years.)
<b>ITAL*3960 Topics in Italian Literature F,W (3-0) [0.50]</b>
Aspects of Italian literature. Each offering will treat a particular topic such as early texts in the Vernacular, Commedia dell'Arte, Eighteenth-Century Drama, realism in Italian Literature, the poetry of Montale, Ungaretti, and Saba. (Offered in even-numbered years.)
<b>ITAL*3970 Topics in Italian Literature F,W (3-0) [0.50]</b>
Aspects of Italian literature. Each offering will treat a particular topic such as early texts in the Vernacular, Commedia dell'Arte, Eighteenth-Century Drama, realism in Italian Literature, the poetry of Montale, Ungaretti, and Saba. (Offered in even-numbered years.)
<b>ITAL*4900 Research Paper in Italian Studies F,W (3-0) [0.50]</b>
This is the equivalent of a semester course. A research project on some aspect of Italian language, literature, or thought. The topic must be approved by the section; the paper will be written under the regular guidance of a faculty advisor. <i>Prerequisite(s):</i> Restricted to the 6th semester in the Italian honours program.

## Landscape Architecture

### *School of Environmental Design and Rural Development*

#### **LARC\*1100 Design and Communications Studio F (3-3) [0.75]**

An introduction to the physical design professions with emphasis on the role of landscape architects. Emphasis on development of design awareness, process, communication skills and creativity.

*Prerequisite(s):* Registration in the B.L.A. program.

*Restriction(s):* Instructor consent required.

#### **LARC\*1950 History of Cultural Form I F (4-0) [0.50]**

This course explores the cultural form expressed in landscapes from ancient times to the 18th century Romantic movements. (Offered through distance education format only.)

#### **LARC\*2020 Design Studio W (2-4) [0.75]**

An examination of the theory, process and vocabulary of spacial design. An exploration of the social, psychological, and behavioural forces a designer must respond to. An introduction to landscape analysis.

*Prerequisite(s):* LARC\*1100

*Restriction(s):* Registration in the B.L.A. program.

#### **LARC\*2100 Landscape Analysis F (2-2) [0.50]**

A study of biophysical factors and their influence on design. Including soils, climate, vegetation, hydrology, and fauna. Natural and cultural systems interpretation, site assessment methods, and data presentation techniques will be outlined. Students will formulate and conduct site assessments that include resource inventories and the analysis for land use suitability.

*Prerequisite(s):* BIOL\*1030, LARC\*2020

*Co-requisite(s):* LARC\*3040 or registration in the U.L.M. B.Sc. (Agr.) program and 5.00 credits

#### **LARC\*2330 Planting Design I W (1-2) [0.25]**

Visual and physical characteristics of plants and their use. Design theory and its application at a site specific scale. Study of the use of plants in a wide range of applications.

#### **LARC\*2340 Planting Design II F (1-2) [0.25]**

Visual and physical characteristics of plants and their use. Design theory and its application at a site specific scale. Study of the use of plants in a wide range of applications.

*Prerequisite(s):* LARC\*2330

#### **LARC\*2410 Site Engineering F (3-1) [0.50]**

A focus on contour grading to facilitate circulation, stormwater runoff, and design intent. Aspects of surveying, plotting, as well as runoff and cut and fill calculations.

*Prerequisite(s):* LARC\*2020, LARC\*2420

#### **LARC\*2420 Materials and Techniques W (3-0) [0.50]**

The study of materials commonly used for landscape construction. Specification of procedures and materials for contractual purposes. Detail drafting.

*Prerequisite(s):* LARC\*1100

#### **LARC\*2820 Urban and Regional Planning W (3-0) [0.50]**

Introduction to the evolution and history of planning and its conceptual base. A study of the theoretical foundations of planning. Emphasis on the Canadian scene and on Canadian planning literature.

#### **LARC\*2950 History of Cultural Form II W (4-0) [0.50]**

This course follows History of Cultural Form I (LARC\*1950) and explores the cultural form of 19th century reform period through to contemporary design developments. (Offered through distance education format only.)

#### **LARC\*3040 Site Planning and Design Studio F (2-4) [0.75]**

Application of the site planning process, including programming, site analysis, functional analysis and diagramming. Application of design theory and landscape analysis to site design.

*Prerequisite(s):* LARC\*2020

*Co-requisite(s):* HORT\*3260, LARC\*2100

#### **LARC\*3050 Landscape Architecture I W (2-4) [0.75]**

Lectures and projects emphasizing the integration of design theory, skills and knowledge using site scale and urban design projects. Highlighting the use of contemporary history.

*Prerequisite(s):* LARC\*3040

#### **LARC\*3060 Landscape Architecture II F (2-4) [0.75]**

Application of the landscape architectural design process to conservation, development and rehabilitation of landscapes. Projects at an intermediate scale focusing on biophysical, cultural and visual resources as primary design determinants. Emphasis on secondary research, analysis, program development, alternative concepts and design master planning.

*Prerequisite(s):* LARC\*3050

#### **LARC\*3070 Landscape Architecture III F (2-6) [1.00]**

Exercises in regional scale design and master planning to provide an understanding of the integrative design process that considers ecological, technological, socio-economic, human and aesthetic factors in the land development process. Projects focus on land planning, community design, urban design, and public involvement and communication.

*Prerequisite(s):* LARC\*3060

#### **LARC\*3430 Landscape Construction I W (2-4) [0.50]**

Lectures and studio exercises that integrate construction documentation with design. The technical procedures needed to direct design implementation including layout, grading, utility design, and planting plans.

*Prerequisite(s):* LARC\*2410

#### **LARC\*3440 Landscape Construction II F (2-4) [0.75]**

Production of construction drawings, documents and cost estimates using computer and manual techniques.

*Prerequisite(s):* LARC\*3430

*Co-requisite(s):* LARC\*3060

#### **LARC\*3500 Independent Study S,F,W (0-6) [0.50]**

Each student establishes, in consultation with the faculty member chosen, the content of special study within the area of expertise of that instructor.

*Prerequisite(s):* LARC\*3040

#### **LARC\*4090 Seminar W (3-0) [0.50]**

An integrated overview of professional issues involving practice, ethics, environmental concerns, government policy, research needs and professional responsibilities to society. Emphasis on writing and oral presentations.

*Prerequisite(s):* LARC\*3060

#### **LARC\*4101 Design Thesis F (1-2) [0.50]**

First part of the two-semester course LARC\*4101/2. Refer to LARC\*4101/2 for course description.

*Prerequisite(s):* LARC\*3050, LARC\*3440

#### **LARC\*4101/2 Design Thesis F-W [1.50]**

The fall semester consists of the study of research methods, research, writing and presentations on individually selected topics. The student uses this work to complete an individual landscape design or planning project in the winter. Each student is to integrate the knowledge and demonstrate the skills acquired in preceding courses in a professional manner. This is a two-semester course offered over consecutive semesters. When you select it you must select LARC\*4101 in the first semester and LARC\*4102 in the second semester. A grade will not be assigned to LARC\*4101 until LARC\*4102 has been completed.

*Prerequisite(s):* LARC\*3050, LARC\*3440

#### **LARC\*4102 Design Thesis W (2-6) [1.00]**

Second part of the two-semester course LARC\*4101/2. Refer to LARC\*4101/2 for course description.

*Prerequisite(s):* LARC\*4101

#### **LARC\*4520 Park and Recreation Administration W (3-0) [0.50]**

A study of the major objectives, policies and administrative practices of the principal park and recreation agencies at various levels of government, with an emphasis on trends and implications for future roles and administrative policies of these agencies. (Offered in odd-numbered years.)

*Prerequisite(s):* 1.00 credits at the 2000 level in social sciences or three semesters of the B.L.A. program

#### **LARC\*4610 Professional Practice F (3-0) [0.50]**

Lectures and assignments dealing with professional ethics, organizations, contract law and procedures, relationships with clients, contractors and professional practitioners, office procedure and professional promotion practices and trends.

*Prerequisite(s):* LARC\*3050

**LARC\*4620 Internship in Landscape Architecture S,F,W (0-10) [1.00]**

An experiential learning opportunity requiring professional office experience and faculty supervision under program regulations. Actual work experience for academic credit. Students are required to submit a project or paper as part of the course requirements.

*Prerequisite(s):* LARC\*3060

**LARC\*4730 Special Study in Landscape Architecture F (0-4) [0.50]**

Supervised independent study involving competitions, special projects, modules, and other formats.

*Prerequisite(s):* LARC\*3050

**LARC\*4740 Case Studies S,F,W (0-6) [0.50]**

Travel and field studies of selected projects as approved by a faculty member. Students are required to submit a project or paper.

*Prerequisite(s):* LARC\*3040

## 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.)*

#### **LAT\*1100 Preliminary Latin I F (3-0) [0.50]**

A beginning course in Latin providing the fundamentals of structure and grammar. (This course may not be taken by anyone who has OAC Latin).

#### **LAT\*1110 Preliminary Latin II W (3-0) [0.50]**

A continuation of LAT\*1100.

*Prerequisite(s):* LAT\*1100 or Year 4 (Grade 12) Latin

#### **LAT\*2000 Latin Literature F (3-0) [0.50]**

A course in Latin literature based on relevant texts.

*Prerequisite(s):* OAC Latin or LAT\*1100

#### **LAT\*4100 Directed Readings in Latin Literature F (3-0) [0.50]**

A reading course in Latin Literature designed according to the needs and the interests of the individual student.

*Prerequisite(s):* CLAS\*3060 or CLAS\*3120

#### **LAT\*4150 Research Paper: Latin F,W (3-0) [0.50]**

A major essay on an area of study to be determined in consultation with the Classics Faculty in the School.

*Prerequisite(s):* CLAS\*3060 or CLAS\*3120

## Linguistics

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*School of Languages and Literatures*

<b>LING*1000 Introduction to Linguistics W (3-0) [0.50]</b>
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The nature of language. An elementary survey of linguistic disciplines. Phonetics, morphology, syntax, semantics, language, and society.
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## 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]**

An examination of the process of analyzing, planning, implementing, coordinating, and controlling programs involved in the conception, pricing, promotion, and distribution of products, services, and ideas designed to create and maintain beneficial exchanges with target markets for the purpose of achieving public and private organizational objectives. (Also offered through distance education format.).

*Equate(s):* COST\*1000

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information. This course may not be taken for credit subsequent to receiving credit in AGE\*4370 or HTM\*3080.

### **MCS\*1400 Introduction to Design W (3-0) [0.50]**

Designed to increase visual awareness and recognition of natural and planned design elements in the environment. Investigation of the roles of designers and an understanding of design as an applied process that responds to human needs.

*Equate(s):* COST\*1400

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

### **MCS\*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

*Restriction(s):* COST\*1800

### **MCS\*2020 Information Management S,F,W (3-0) [0.50]**

Introduces the concepts and principles of information acquisition, manipulation and management as relevant to organizational decision-making. Provides experience in the evaluation of information technology applications used in organizations. Students with credit for this course may not proceed to CIS\*1000, CIS\*1200.

*Prerequisite(s):* 5.00 credits

*Equate(s):* COST\*2020

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information. Not available to students registered in B.Comp program or CIS majors and minors.

### **MCS\*2100 Personal Financial Management S (3-0) [0.50]**

An introductory course designed to meet the professional needs of those in teaching, counselling and community service, as well as personal goals in financial management.

*Prerequisite(s):* 5.00 credits

*Equate(s):* COST\*2100

### **MCS\*2600 Fundamentals of Consumer Behaviour F,W (3-0) [0.50]**

In the long run 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):* (1 of MCS\*1000, HAFA\*1000 , HTM\*1000), (1 of PSYC\*1100, PSYC\*1200, SOC\*1100)

*Equate(s):* COST\*2600

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

### **MCS\*2810 Social Aspects of Housing F (3-0) [0.50]**

An overview of the impact of the residential environment upon lifestyles at various stages in the life cycle. Topics include the effect of neighbourhood and dwelling design upon children, seniors and the economically and physically handicapped. Consideration will be given to the development of behaviorally based design guidelines. (Last offering is Fall 2006.)

*Prerequisite(s):* 5.00 credits

*Equate(s):* COST\*2810

### **MCS\*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\*2850 Service Learning in Housing F (3-0) [0.50]**

The intent of this course is to provide an introduction to ethics and social capital 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. (First offering is Fall 2007)

*Prerequisite(s):* 5.00 credits

*Equate(s):* COST\*2850

*Restriction(s):* MCS\*2810

### **MCS\*3010 Quality Management W (3-0) [0.50]**

Lectures will include general concepts and expectations of quality assurance from consumer, government, managerial and technological points of view and discuss 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 0.50 credits in statistics

*Equate(s):* COST\*3010

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

### **MCS\*3020 Services Marketing F,W (3-0) [0.50]**

Global economies today are largely dominated by the service industry. This course examines the problems facing leaders of service organizations. The course concentrates on areas such as developing service strategy, value creation, service performance measurement, and the impact of globalization and e-business.

*Prerequisite(s):* 10.00 credits including 1 of AGE\*4370, MCS\*1000, HAFA\*3080 , HTM\*3080

*Equate(s):* COST\*3020

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

### **MCS\*3030 Research Methods F,W (2-2) [0.50]**

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 and research management, analysis and interpretation, and report writing.

*Prerequisite(s):* STAT\*2060 or STAT\*2090

*Equate(s):* COST\*3030

*Restriction(s):* Registration in the B.Comm. Marketing Management Major, regular or co-op, Housing and Real Estate Management Major, regular and co-op, or the B.A. Marketing Management Minor.

### **MCS\*3040 Business and Consumer Law F,W (3-0) [0.50]**

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 producer/consumer relationships. Discussion topics include sale of goods and consumer protection legislation; debtor-creditor relations; competition law; intellectual property rights and manufacturers' product liability.

*Prerequisite(s):* 5.00 credits

*Equate(s):* COST\*3040

*Restriction(s):* This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

### **MCS\*3100 Economic Behaviour of Households W (3-0) [0.50]**

A micro analysis of the patterns of resource use pursued by the household as conditions inside and outside the household change. Students are expected to possess or develop facility with the calculus of multivariable functions, constrained optimization, and multiple regression analysis.

*Prerequisite(s):* ECON\*2310

*Equate(s):* COST\*3100

**MCS\*3600 Consumer Information Processes F,W (3-0) [0.50]**

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):* MCS\*2600, MCS\*3030

*Equate(s):* COST\*3600

**MCS\*3610 Consumer Economics F (3-0) [0.50]**

The course examines applications of macro and micro economic theory to the consumption process. Students are expected to possess or develop facility with calculus and multiple regression analysis.

*Prerequisite(s):* ECON\*2310, ECON\*2410, STAT\*2060

*Equate(s):* COST\*3610

**MCS\*3620 Marketing Communications F,W (3-0) [0.50]**

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 and MCS\*2600

*Equate(s):* COST\*3620

*Restriction(s):* Registration in the B.Comm. Program. This is a Priority Access Course and some restrictions may apply during some time periods. Please contact the department for more information.

**MCS\*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. (First offering is Fall 2008.)

*Prerequisite(s):* MCS\*1820, STAT\*2060

*Equate(s):* COST\*3810

**MCS\*3820 Real Estate Development W (3-0) [0.50]**

This course introduces the student to the real estate development process, providing an overview from the project idea to the cursory feasibility stage. The steps in development planning that will be investigated are analysis, design, and evaluation. Topics include evaluating development potential, land acquisition, site planning, economic feasibility studies, approval processes, construction, project management, and marketing phases. The construction of both single family housing and larger buildings is examined. (First offering is Winter 2009.)

*Prerequisite(s):* MCS\*1820

*Equate(s):* COST\*3820

*Restriction(s):* MCS\*4860

**MCS\*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

*Restriction(s):* Instructor consent required.

**MCS\*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

*Restriction(s):* Instructor consent required.

**MCS\*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):* (COST\*1800 or MCS\*1820), and (1 of MCS\*2820, ECON\*3560, HTM\*3070)

*Equate(s):* COST\*3890

**MCS\*4020 Research in Consumer Studies U (3-0) [0.50]**

An independent investigation of a pertinent topic in consumer studies. Registration requires departmental approval.

*Prerequisite(s):* MCS\*3030

*Equate(s):* COST\*4020

**MCS\*4040 Management in Product Development F (3-0) [0.50]**

Major course components include: 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):* Registration in the B.Comm. program (Marketing Management major) and 12.50 credits including MCS\*2600.

*Equate(s):* COST\*4040

**MCS\*4050 The Evolution of Capitalism: A Canadian Perspective F,W (3-0) [0.50]**

A Canadian perspective on capitalism as an evolving process of creative destruction; implications for Canadian culture and the allocation of economic, political, and social power; effects on education, the capacity of governments to govern, and societal notions of what constitutes the public good.

*Prerequisite(s):* 12.50 credits including MCS\*2600, ECON\*1050, ECON\*1100

*Equate(s):* COST\*4050

**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 product 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):* 10.00 credits

*Equate(s):* AGE\*4370, COST\*4370

*Restriction(s):* Registration in the B.Comm. program (Marketing Management major).

**MCS\*4600 International Marketing F,W (3-0) [0.50]**

The study of marketing in 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):* MCS\*1000, MCS\*2600, MCS\*3030

*Equate(s):* COST\*4600

*Restriction(s):* Registration in the B.Comm program (Marketing Management major).

**MCS\*4810 Real Estate and Housing Project W (3-0) [0.50]**

This course is a capstone course meant to bring together concepts from all other Real Estate and Housing courses. It deals with the development, redevelopment and renewal of housing and real estate services. Students will complete a project that addresses an issue in the real estate or housing sector, applying knowledge of development, market analysis, affordability, financing and government regulation.

*Prerequisite(s):* 15.00 credits

*Equate(s):* COST\*4810

*Restriction(s):* Registration in the B. Comm program (Real Estate and Housing major) or permission of the instructor.

**MCS\*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):* (CIS\*1000 or MCS\*2020), (1 of MCS\*2820, ECON\*3560, HTM\*3070)

*Equate(s):* COST\*4820

**MCS\*4840 Housing and Real Estate Law F (3-0) [0.50]**

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):* 10.00 credits including MCS\*1000, COST\*1800 , MCS\*2820

*Equate(s):* COST\*4840

**MCS\*4850 Housing Policies F (3-0) [0.50]**

Examines both substantive and jurisdictional policy and program development at the federal, provincial and local levels. The policy making process will be reviewed as well as policy and program evaluation techniques. The emphasis is on Canada although comparisons with other countries will be discussed. (Last Offering is Fall 2007.)

*Prerequisite(s):* 10.00 credits including COST\*1800 , MCS\*2820

*Equate(s):* COST\*4850

**MCS\*4860 Housing Industry Structure and Process W (3-0) [0.50]**

The development and construction sectors of the housing industry will be examined from both the structural and process perspectives in order to develop an understanding of how the industry adapts and how organizations operate. The course will focus on Canadian residential housing industry organizations and related agencies. (Last Offering is Winter 2008)

*Prerequisite(s):* 10.00 credits including COST\*1800 , MCS\*2820

*Equate(s):* COST\*4860

**MCS\*4910 Topics in Consumer Studies U (3-0) [0.50]**

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.

*Prerequisite(s):* Will be indicated by the department when the course is offered.

*Equate(s):* COST\*4910

*Restriction(s):* Instructor consent required.

**MCS\*4920 Topics in Consumer Studies U (3-0) [0.50]**

Same description as MCS\*4910.

*Equate(s):* COST\*4920

**MCS\*4950 Consumer Studies Practicum U (3-0) [0.50]**

The practicum provides supervised experience in applying the concepts and principles of consumer studies to contemporary issues in areas such as consumer finance, consumer policy, housing, product standards and quality assurance.

*Prerequisite(s):* 15.00 credits

*Equate(s):* COST\*4950

*Restriction(s):* Instructor and Department Chair consent required.

## 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\*1000, one STAT\*XXXX course

### **MATH\*1000 Introductory Calculus F,W (3-1) [0.50]**

A brief introduction to analytical geometry. The differential and integral calculus for algebraic, logarithmic, exponential and trigonometric functions, with applications. (Also offered through distance education format.)

*Prerequisite(s):* 1 4U credit in mathematics or 1 OAC credit in mathematics

*Restriction(s):* IPS\*1110, MATH\*1080, MATH\*1200. Not available to students registered in the B.Sc. and B.Sc. (Agr.) programs.

### **MATH\*1050 Introduction to Mathematical Modeling W (3-1) [0.50]**

The application of non-calculus techniques in modeling "real world" problems in business, psychology, sociology, political science and ecology. The mathematical topics introduced include graphs and directed graphs, linear programming, matrices, probability, games and decisions, and difference equations. Mathematics majors may not take this course for credit.

*Equate(s):* CIS\*1900

*Restriction(s):* Not available to students registered in B.Comp programs or CIS majors and minors.

### **MATH\*1080 Elements of Calculus I F,W (3-1) [0.50]**

The elements of the calculus of one variable with illustration and emphasis on its application in the biological sciences. The elementary functions, sequences and series, difference equations, differential and integral calculus.

*Prerequisite(s):* 4U Advanced Functions and Calculus or OAC Calculus

*Restriction(s):* MATH\*1000, MATH\*1200, IPS\*1110

### **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):* 4U Advanced Functions and Calculus or OAC Calculus

*Restriction(s):* MATH\*1000, MATH\*1080, IPS\*1110

### **MATH\*1210 Calculus II S,W (3-1) [0.50]**

Topics include inverse functions, inverse trigonometric functions, hyperbolic and inverse hyperbolic functions, indeterminate forms and l'Hopital's rule; techniques of integration; parametric equations; polar coordinates; introduction to MacLaurin and Taylor series; functions of several variables; and partial derivatives.

*Prerequisite(s):* 1 of IPS\*1110, MATH\*1000, MATH\*1080, MATH\*1200, instructor consent

*Restriction(s):* MATH\*2080

### **MATH\*2000 Set Theory F (3-1) [0.50]**

The algebra of sets. Equivalence relations, mappings and inverse mappings. Review of the real number system. Countable and uncountable sets. Partially and totally ordered sets. Complex numbers and their arithmetic. Geometry and topology of the line and the plane. Emphasis is placed on developing skills in constructing mathematical proofs.

*Prerequisite(s):* 0.50 credits in calculus at the university level

### **MATH\*2080 Elements of Calculus II F,W (3-1) [0.50]**

Techniques of integration, introduction to differential equations and the elements of multivariate calculus. Illustrations and emphasis will be on biological applications. An introduction to vectors, multivariable and vector functions, difference equations, partial differentiation and multiple integration.

*Prerequisite(s):* 1 of IPS\*1110, MATH\*1000, MATH\*1080, MATH\*1200

*Restriction(s):* IPS\*1210, MATH\*1010, MATH\*1210

### **MATH\*2130 Numerical Methods S,W (3-2) [0.50]**

This course provides an overview of and practical experience in utilizing algorithms for solving numerical problems arising in applied sciences. Topics covered will include solution of a single nonlinear equation, interpolation, numerical differentiation and integration, solution of differential equations and systems of linear algebraic equations. Students will utilize computers in solving problem assignments.

*Prerequisite(s):* 1 of IPS\*1210, MATH\*1010, MATH\*1210, MATH\*2080

### **MATH\*2150 Applied Matrix Algebra S,F,W (3-1) [0.50]**

Matrices and matrix operations, matrix inverse and determinant, linear equations. N-dimensional vectors: dot product, linear independence, basis and dimension. Rank of a matrix. Eigenvalues, eigenvectors and diagonalization. Applications, including least squares. (Also offered through distance education format.)

*Prerequisite(s):* 1 of a 4U mathematics credit, an OAC mathematics credit, first year university mathematics credit

*Restriction(s):* MATH\*2160

### **MATH\*2160 Linear Algebra I F (3-0) [0.50]**

Matrix notation, matrix arithmetic, matrix inverse and determinant, linear systems of equations, and Gaussian elimination. The basic theory of vector spaces and linear transformations. Matrix representations of linear transformations, change of basis, diagonalization. Inner product spaces, quadratic forms, orthogonalization and projections.

*Prerequisite(s):* (IPS\*1110 or MATH\*1200), (1 of MATH\*2150, 4U Geometry and Discrete Mathematics, OAC Algebra and Geometry)

### **MATH\*2170 Differential Equations I W,S (3-1) [0.50]**

First order equations, linear equations of second and higher orders, phase plane, difference equations, introduction to power series methods, Laplace transforms, formulation, solution and interpretation of differential equations of interest in science.

*Prerequisite(s):* 1 of IPS\*1210, MATH\*1010, MATH\*1210, MATH\*2080

*Restriction(s):* MATH\*2270

### **MATH\*2200 Advanced Calculus I F (3-0) [0.50]**

Infinite sequences and series of numbers, power series, tests for convergence; Taylor's theorem and Taylor series for functions of one variable; planes and quadratic surfaces; limits, continuity, and differentiability; partial differentiation, directional derivatives and gradients; tangent planes, linear approximation, and Taylor's theorem for functions of two variables; critical points, extreme value problems; implicit function theorem; Jacobians; double integrals, iterated integrals and change of variables.

*Prerequisite(s):* 1 of IPS\*1210, MATH\*1210, MATH\*2080

### **MATH\*2210 Advanced Calculus II W (3-0) [0.50]**

Spherical and cylindrical polar coordinate transformations; multiple integrals; line integrals; vector and scalar fields including the gradient, divergence, curl and directional derivative, and their physical interpretation; theorems of Green and Stokes; uniform convergence.

*Prerequisite(s):* MATH\*2200, (MATH\*1200 is strongly recommended)

### **MATH\*2270 Applied Differential Equations F (3-1) [0.50]**

Solution of differential equations which arise from problems in engineering. Linear equations of first and higher order; systems of linear equations; Laplace transforms; series solutions of second-order equations; introduction to partial differential equations.

*Prerequisite(s):* ENGG\*1500, MATH\*1210

*Restriction(s):* MATH\*2170

### **MATH\*3100 Differential Equations II F (3-1) [0.50]**

First order linear systems and their general solution by matrix methods. Introduction to nonlinear systems, stability, limit cycles and chaos using numerical examples. Solution in power series of second order equations including Bessel's equation. Introduction to partial differential equations and applications.

*Prerequisite(s):* (MATH\*2150 or MATH\*2160), MATH\*2170

### **MATH\*3130 Algebraic Structures F (3-0) [0.50]**

Symmetric groups; introduction to group theory; groups, subgroups, normal subgroups, factor groups, fundamental homomorphism theorem. Introduction to ring theory; rings, subrings, ideals, quotient rings, polynomial rings, fundamental ring homomorphism theorem.

*Prerequisite(s):* MATH\*2000, (MATH\*2150 or MATH\*2160)

### **MATH\*3160 Linear Algebra II W (3-0) [0.50]**

Complex vector spaces. Direct sum decompositions, Cayley-Hamilton theorem, spectral theorem for normal operators, Jordan canonical form of a matrix.

*Prerequisite(s):* MATH\*2160

<b>MATH*3170 Partial Differential Equations and Special Functions W (3-0) [0.50]</b>
Wave equation, heat equation, Laplace equation, linearity and separation of variables; solution by Fourier series; Bessel and Legendre functions; Fourier transforms; introduction to the method of characteristics.
<i>Prerequisite(s):</i> MATH*2000, MATH*3100
<b>MATH*3200 Real Analysis F (3-0) [0.50]</b>
Metric spaces and normed linear spaces. Fixed point theorems with applications to fractals. Uniform continuity. Riemann-Stieltjes integration.
<i>Prerequisite(s):</i> MATH*2000, MATH*2160, MATH*2210
<b>MATH*3240 Operations Research F (3-0) [0.50]</b>
Mathematical models. Linear programming and sensitivity analysis. Network analysis: shortest path, maximum flow and minimal spanning tree problems. Introduction to non-linear programming. Constrained optimization: the Frank-Wolfe method. Deterministic and probabilistic dynamic programming.
<i>Prerequisite(s):</i> (MATH*2150 or MATH*2160), 0.50 credits in statistics
<i>Co-requisite(s):</i> MATH*2200
<b>MATH*3260 Complex Analysis W (3-0) [0.50]</b>
The complex derivative and planar mappings. Analytic and harmonic functions. Conformal mappings. Elementary functions. Cauchy-Goursat theorem. The Taylor and Laurent series. Calculus of residues with emphasis on applications.
<i>Prerequisite(s):</i> MATH*2000, MATH*2200
<b>MATH*3510 Biomathematics W (3-0) [0.50]</b>
Development, analysis, and interpretation of mathematical models of biological phenomena. Emphasis will be on deterministic discrete and continuous models.
<i>Prerequisite(s):</i> (MATH*2150 or MATH*2160), (MATH*2170 or MATH*2270), at least 0.50 credits in statistics at the 2000 level or above
<b>MATH*4000 Advanced Differential Equations F (3-0) [0.50]</b>
A rigorous treatment of the qualitative theory of ordinary differential equations and an introduction to the modern theory of dynamical systems, existence, uniqueness, and continuity theorems. Definition and properties of dynamical systems. Linearization and local behaviour of nonlinear systems. Stable Manifold theorem. Liapunov stability. Limit cycles and Poincaré-Bendixson Theorem. Introduction to bifurcations and chaotic dynamics.
<i>Prerequisite(s):</i> MATH*3100, (MATH*3160 or MATH*3200)
<b>MATH*4050 Topics in Mathematics I W (3-0) [0.50]</b>
Discussion of selected topics at an advanced level. Intended mainly for mathematics students in the 6th to 8th semester. Content will vary from year to year. Sample topics: probability theory, Fourier analysis, mathematical logic, operator algebras, number theory combinatorics, philosophy of mathematics, fractal geometry, chaos, stochastic differential equations. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> MATH*2160, MATH*3200
<b>MATH*4060 Topics in Mathematics II W (3-0) [0.50]</b>
Discussion of selected topics at an advanced level as in MATH*4050, but with different choice of topic. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> MATH*2160, MATH*3200
<b>MATH*4070 Case Studies in Modeling F (2-2) [0.50]</b>
Study of selected topics in applied mathematics at an advanced level, intended mainly for mathematical science students in the 7th or 8th semester. Sample topics are optimal control theory and nonlinear programming. The course will include case studies of real-world problems arising from various areas and the contribution of mathematical models to their solution. Part of the course requirement will involve the completion of a mathematical modeling project in conjunction with the departmental Mathematics and Statistics Clinic. For further information concerning the Clinic, consult the department. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 3.50 credits in mathematical science including MATH*2130
<b>MATH*4140 Applied Algebra W (3-0) [0.50]</b>
Finite symmetric groups, dihedral and cyclic groups with applications to the group of symmetries of a geometric figure in the plane. Polya-Burnside method of enumeration with applications. Galois fields with applications to combinatorial design constructions. Error correcting binary codes. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> MATH*3130
<b>MATH*4200 Advanced Analysis F (3-0) [0.50]</b>
Sequences and series of functions. Stone-Weierstrass approximation theorem. Compactness in function spaces. Introduction to complex dynamics and the Mandelbrot set. Multivariate differential calculus.
<i>Prerequisite(s):</i> MATH*3160, MATH*3200, MATH*3260

<b>MATH*4220 Applied Functional Analysis W (3-0) [0.50]</b>
Hilbert and Banach spaces: applications to Fourier series and numerical analysis. Hahn-Banach theorem; weak topologies. Generalized functions; application to differential equations. Completeness; uniform boundedness principle. Lebesgue measure and integral; applications to probability and dynamics. Spectral theory. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> MATH*2160, MATH*3200
<b>MATH*4240 Advanced Topics in Modeling W (3-0) [0.50]</b>
A study of selected advanced topics in mathematical modeling, to include model formulation, techniques of model analysis and interpretation of results. Topics usually include transportation and assignment problems, minimum cost flow problems and network simplex methods, Markov chains, queuing theory. Student participation in researching a project and in the preparation of a report.
<i>Prerequisite(s):</i> MATH*3240
<b>MATH*4270 Advanced Partial Differential Equations F (3-0) [0.50]</b>
Theory of 1st and 2nd order partial differential equations with examples. Classification of linear second order PDE. Theory and examples of associated boundary value problems. Maximum principles. Green's functions. Introduction to nonlinear PDE. Applications.
<i>Prerequisite(s):</i> MATH*3170, MATH*3200, MATH*3260
<b>MATH*4290 Geometry and Topology W (3-0) [0.50]</b>
Classical geometry of the plane and 3-space. Non-Euclidean geometries. Elementary topology of graphs and surfaces. Topics to be selected from: algebraic geometry; analysis on manifolds; Riemannian geometry; tensor analysis; homotopy and homology groups. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> MATH*2160, MATH*3130, MATH*3200
<b>MATH*4430 Advanced Numerical Methods F (3-0) [0.50]</b>
Numerical solution of linear systems, differential equations; the algebraic eigenvalue problem, interpolation and approximation of functions, numerical quadrature.
<i>Prerequisite(s):</i> MATH*2130, (MATH*2150 or MATH*2160), MATH*2200, (MATH*2170 or MATH*2270)
<b>MATH*4510 Environmental Transport and Dynamics F (3-0) [0.50]</b>
Mathematical modeling of environmental transport systems. Linear and nonlinear compartmental models. Convective and diffusive transport. Specific models selected from hydrology; ground-water and aquifer transport, dispersion of marine pollution, effluents in river systems; atmospheric pollen dispersion, plume models, dry matter suspension and deposition; Global circulation: tritium distribution. (Offered in odd-numbered years.)
<i>Prerequisite(s):</i> MATH*3510 or MATH*3100, 0.50 credits in statistics

## 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):* BIOL\*2210, MBG\*2020

*Equate(s):* MBG\*4620

### MCB\*4050 Protein and Nucleic Acid Structure F (3-0) [0.50]

This course explores the physical conformation and atomic structures of proteins and nucleic acids and the techniques and tools for the determination, comparison, and prediction of macromolecular structures. Students will design their own protein structures as part of experiencing the process of scientific writing, peer-review and publishing.

*Prerequisite(s):* BIOC\*3560

*Equate(s):* BIOC\*4550 , MBG\*4350

### MCB\*4080 Applied Microbiology and Biochemistry F (3-0) [0.50]

This course is a study of how microorganisms, their enzymes and biochemical pathways can be manipulated to produce goods and services in industry, medicine and scientific research. The means by which the yields of secondary metabolites, enzymes, and genetically selected products can be maximized are considered and examples of specific processes are examined. Department of Molecular and Cellular Biology and Department of Environmental Biology.

*Prerequisite(s):* 1 of BIOC\*3560, BIOC\*3570, MICR\*2020, MICR\*2030

*Equate(s):* BIOC\*4570 , MICR\*4260

## Meteorology

*Department of Land Resource Science*

### **MET\*1000 The Atmospheric Environment S (3-0) [0.50]**

An introduction to the atmospheric environment which covers global to local scales. Topics covered are: understanding weather maps and forecasts, weather indices for plants and people, local-scale microclimates of natural surfaces and cities, intentional modification of microclimates, diffusion of pollutants in the atmosphere and their impact on air quality and climate change, policy issues associated with air quality and climate change. (Offered through distance education format only.)

*Restriction(s):* Not available to students with previous MET credit. Not available to students registered in B.Sc. or B.Sc.(Env.) programs.

### **MET\*2020 Agrometeorology W (3-0) [0.50]**

Weather and climate effects on agricultural production. Relation of water balance and other climate factors to growth and yield of crops, introduction to crop-weather modeling, climate hazards and their control, weather aspects of pest and disease management.

*Prerequisite(s):* BIOL\*1020 or BIOL\*1030

### **MET\*2030 Meteorology and Climatology F (3-2) [0.50]**

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 MET\*2020, PHYS\*1000, PHYS\*1070, PHYS\*1080, PHYS\*1110, PHYS\*1130

### **MET\*3050 Microclimatology W (3-0) [0.50]**

Natural and intentionally-modified microclimates near the earth's surface; energy budgets; transport of mass and heat. Familiarization with some instruments for microclimatic measurements.

*Prerequisite(s):* 1 of MET\*2020, MET\*2030, GEOG\*2110

### **MET\*4100 Physical Meteorology W (3-0) [0.50]**

This course introduces the principles of physical meteorology, including structure and composition of the atmosphere, radiative transfer, atmospheric energetics and cloud formation. All topics will be discussed in terms of global climate change. (Offered in odd-numbered years.)

*Prerequisite(s):* MET\*3050

### **MET\*4210 Atmospheric Experimentation and Instrumentation W (3-0) [0.50]**

This course covers the design and implementation of field experiments 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 prepare a proposal detailing an experimental design of their own.

*Prerequisite(s):* MET\*2030 or MET\*3050

*Restriction(s):* MET\*4230

### **MET\*4300 Atmospheric Transport and Chemistry W (3-0) [0.50]**

Behaviour of synoptic scale weather systems and the transport of substances in the atmosphere. Chemical and photochemical transformations during transport; scavenging and removal from the atmosphere. (Offered in even-numbered years.)

*Prerequisite(s):* (1 of CHEM\*1310, CHEM\*3360, ENGG\*3360, TOX\*3360, ENVS\*3360), MET\*2030

*Restriction(s):* MET\*4310

### **MET\*4310 Atmospheric Transport and Chemistry W (3-3) [0.75]**

Identical to MET\*4300 with the addition of a laboratory component which emphasizes aspects of Dynamic and Synoptic Meteorology including weather map analysis and forecasting, atmospheric dynamics, geostrophic and thermal winds, vorticity, and mechanisms of pressure change. Lectures taken with MET\*4300. (Offered in even-numbered years.)

*Prerequisite(s):* (1 of CHEM\*1310, CHEM\*3360, ENGG\*3660, TOX\*3360, ENVS\*3360), MET\*2030

*Restriction(s):* MET\*4300

## Microbiology

*Department of Environmental Biology*

*Department of Molecular and Cellular Biology*

*Department of Pathobiology*

### **MICR\*1020 Fundamentals of Applied Microbiology F (2-3) [0.50]**

This course is designed for students in engineering and applied human nutrition. The importance of microbes from an environmental point of view, including water systems and soils as well as their importance in disease, nutrition, food and food processing will be emphasized. The theoretical basis of microbial analysis and control measures will be included. The laboratory component of the course will deal with microbial growth and practical aspects of microbial analysis of environmental and food samples including identification and enumeration of specific microorganisms and approaches for their control. B.Sc. students cannot take this course for credit. Department of Molecular and Cellular Biology.

*Restriction(s):* BIOL\*1030, BIOL\*1040. Registration in B.A.Sc. Program (Applied Human Nutrition major) or B.Sc. (Eng.) program.

### **MICR\*2020 Microbial Interactions and Associations F,W (3-0) [0.50]**

The interactions and associations of microorganisms with each other and with components of both the biotic and abiotic worlds have an enormous impact on daily life and their influence is felt on a global basis. The diversity of microorganisms including viruses, bacteria, fungi and protozoa will be presented in the context of such interactions and impact. The interactions of microbes with host organisms in symbioses and pathogenesis, and their survival strategies in extreme environments will be examined. The host-pathogen interactions in disease will be emphasized, but balanced with consideration of the beneficial aspects of microorganisms such as their role in biogeochemical cycles and their application in biotechnology. Assignments will evaluate contemporary microbiological issues in the context of the corresponding scientific literature. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOL\*1040 or equivalent

### **MICR\*2030 Microbial Growth S,F,W (2-3) [0.50]**

The environmental factors and physiological processes of microbial growth. The transport of nutrients, the metabolic availability of energy, metabolic patterns, and versatility in diverse microorganisms. Microscopy, isolation and enumeration, measurement of growth. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOL\*1040

### **MICR\*3110 Techniques in Microbiology W (3-3) [0.50]**

An "open laboratory" course. Techniques used in microbiology laboratories will be studied, including: kinetics of microbial growth, cell harvesting and disruption, separation and biochemical analysis of cell constituents. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOC\*2580, MICR\*2030, MBG\*2020

### **MICR\*3120 Systematic Bacteriology F (2-3) [0.50]**

Classification, nomenclature, and identification of bacteria. Methods and approaches for the isolation and identification of bacteria are considered in the laboratory. The characteristics of some groups of common bacteria and the contributions of molecular systematics to bacterial classification are discussed. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MICR\*2030

### **MICR\*3220 Plant Microbiology F (3-0) [0.50]**

Interaction between plants and microorganisms. Topics include molecular plant-microbe interactions, plant defenses, bacterial ice nucleation, interaction among plant microbes, root nodulation, mycorrhizae, wood decay, and decomposition of plant litter. Department of Environmental Biology.

*Prerequisite(s):* BIOL\*1040

### **MICR\*3230 Immunology I F (3-0) [0.50]**

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. Department of Molecular and Cellular Biology and Department of Pathobiology.

*Prerequisite(s):* BIOL\*1040, BIOC\*2580

### **MICR\*3260 Microbial Adaptation and Development W (3-1) [0.50]**

Adaptation, development, and modulation of microbial physiology in response to environmental stimuli (tutorials included). Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOC\*3560, (MBG\*3070 or MBG\*3080)

### **MICR\*4010 Pathogenic Bacteriology W (3-0) [0.50]**

Interactions between bacterial 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 bacteria causing human and animal diseases are considered. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MICR\*3120, MICR\*3230, (MBG\*3070 or MBG\*3080)

### **MICR\*4120 Virology F (3-3) [0.50]**

Viral diversity, structure and composition. Growth, assay and purification. Lytic replication of bacteriophages; lysogeny and transduction. Animal virus replication cycle and organization of viral DNA and RNA genomes and strategies for their expression and replication. Tumor virology. Induction and mechanism of action of interferon. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOL\*2210, MBG\*2020

### **MICR\*4140 Soil Microbiology and Biotechnology F (3-0) [0.50]**

The biology of soil microorganisms with an emphasis on their integrated ecology, physiology, genetics and biotechnological uses in the soil environment. The response of soil microorganisms to soil physical-chemical factors and aspects of nutrient cycling in soil. Current topics also include soil as an environment for microorganisms, microbial evolution, soil microbial biodiversity, gene flow and microbial nucleic acids in soil, microbial survival and activity in soil, metabolism of soil pollutants and metal-microbe interactions. The use of molecular-based methods to study microorganisms in soil. Regulations and guidelines on the biotechnological applications of microorganisms in the soil environment will be discussed. Department of Environmental Biology.

*Prerequisite(s):* BIOC\*2580, BIOL\*1040

### **MICR\*4180 Microbial Processes in Environmental Management F (3-0) [0.50]**

The metabolic basis of microbial processes fundamentally important in the management of agricultural, industrial or municipal wastes are examined. Topics covered include relevant considerations in using microorganisms for pollution control, factors that affect efficient microbial degradation in the environment, and major microbial enzyme systems/pathways for biodegradation of persistent pollutants. Emphasis will be placed on the biochemistry, physiology, genetics and biotechnological applications of pollutant-degrading microorganisms. Department of Environmental Biology.

*Prerequisite(s):* BIOC\*2580, BIOL\*1040

### **MICR\*4230 Immunology II W (3-3) [0.50]**

Concepts and current knowledge of the diversity of immune response, experimental systems used in studying immunology, antigen-antibody reaction methods, monoclonal antibodies, antibody engineering, hypersensitivity reactions, autoimmunity, and adhesion molecules and homing of cells of the immune system. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MICR\*3230

### **MICR\*4240 Topics in Microbiology S,F,W (1-3) [0.50]**

Independent study of a selected topic in microbiology, involving a review and critical appraisal of the current literature. Written and oral presentations are required. Department of Molecular and Cellular Biology.

*Restriction(s):* Students are required to discuss a topic with a potential supervisor before registering for the course. Open to students in semesters 6, 7 and 8. Instructor consent required.

### **MICR\*4270 Microbial Design F (3-0) [0.50]**

Diversity in structure and function of microorganisms. Adaptation to meet functional demands of the environment. Differences between the Bacteria, Archaea, and Eukarya are emphasized, particularly in respect to action of antimicrobial agents. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOC\*3560, (MBG\*3070 or MBG\*3080)

*Restriction(s):* MICR\*3250

### **MICR\*4290 Microbial Ecology W (2-3) [0.50]**

Microorganisms and transformations involved in the major geochemical cycles in marine, fresh water and terrestrial ecosystems. Factors which affect these activities are considered including nutrition, temperature, pressure, salinity, pH, and oxidation/reduction potential. Common techniques used in ecological research such as measurement of ATP and radioisotope measurement of mineralization are studied in the laboratory section. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MICR\*2030

### **MICR\*4310 Research Project I S,F,W (0-12) [1.00]**

Independent research projects involving experimental or practical work, conducted under the supervision of a faculty member. Results are presented in written and oral form. Department of Molecular and Cellular Biology.

*Restriction(s):* Students must have a research advisor and permission from the course coordinator before registering. Instructor consent required.

**MICR\*4320 Research Project II S,F,W (0-12) [1.00]**

Independent research projects involving experimental or practical work, conducted under the supervision of a faculty member. Results are presented in written and oral form. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MICR\*4310

*Restriction(s):* Students must have a research advisor and permission from the course coordinator before registering. Instructor consent required.

**MICR\*4430 Medical Virology W (3-0) [0.50]**

A study of the interactions of animal viruses and their hosts and of important diseases of humans caused by viruses in different taxonomic groups. The emphasis is on aspects of pathogenesis, epidemiology, immune responses and control. Recent advances in the application of molecular biology to the development of diagnostic tests and vaccines will be included. Department of Pathobiology.

*Prerequisite(s):* MICR\*4120

## Molecular Biology and Genetics

*Department of Animal and Poultry Science*

*Department of Molecular and Cellular Biology*

*Department of Plant Agriculture*

*Department of Integrative Biology*

### **MBG\*1000 Genetics and Society F,W (3-1) [0.50]**

Basic principles of genetics at work 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. Department of Molecular and Cellular Biology.

*Restriction(s):* Not available to students registered in B.Sc. programs.

### **MBG\*2000 Introductory Genetics S,F,W (3-2) [0.50]**

Fundamental aspects of genetics including the chromosomal basis of inheritance, cytogenetics, genes in populations and quantitative traits. Additional topics include extranuclear inheritance, human genetics, bacterial and viral genetics. The molecular nature of the gene and general mechanisms of gene expression will be introduced but not covered in detail as these topics are expanded in MBG\*2020. Intended as the foundation course in genetics for science students and is a prerequisite for all upper level courses in molecular biology and genetics including MBG\*2020. Department of Molecular and Cellular Biology.

*Prerequisite(s):* 4 credits including BIOL\*1040

### **MBG\*2020 Introductory Molecular Biology S,F,W (3-2) [0.50]**

Introduction to the processes by which genetic information is stored, replicated, and expressed in living organisms and the experimental techniques used to study these processes. DNA, gene-protein relationships, and the genetic code. Replication, chromosomes, transcription, and translation. Techniques employed in molecular cloning and applications. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOC\*2580, MBG\*2000

### **MBG\*3000 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. Department of Integrative Biology.

*Prerequisite(s):* MBG\*2000

### **MBG\*3050 Human Genetics W (3-3) [0.50]**

A course 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. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*2020

### **MBG\*3060 Quantitative Genetics W (3-2) [0.50]**

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. Department of Animal and Poultry Science.

*Prerequisite(s):* MBG\*2000, 0.50 credits in statistics

### **MBG\*3070 Bacterial Genetics S,F (3-3) [0.50]**

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. This course is restricted to students in the B.Sc. Major in Microbiology or Molecular Biology and Genetics programs, unless approval by the course instructor is obtained. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*2020, MICR\*2030

*Restriction(s):* MBG\*3080

### **MBG\*3080 Bacterial Genetics S,F (3-0) [0.50]**

Lecture portion only of MBG\*3070. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*2020, MICR\*2020

*Restriction(s):* MBG\*3070

### **MBG\*3090 Applied Animal Breeding F (3-2) [0.50]**

The basis of, and methods for, effective use of modern animal breeding tools for practical improvement of livestock species. An examination and comparison of the structure of genetic improvement programs across species. International aspects and challenges to animal breeding programs. Department of Animal and Poultry Science.

*Prerequisite(s):* MBG\*2000, 0.50 credits in statistics

### **MBG\*3100 Plant Genetics F (3-2) [0.50]**

Reproduction in plants, genetic and cytogenetic structure of plants, nature of phenotypic variability in plants, patterns of response to selection in plant populations, measurement of continuous and discontinuous genetic variability in plant populations. Department of Plant Agriculture.

*Prerequisite(s):* (MBG\*2000 or AGR\*2451/2 for B.Sc.(Agr.) students only), STAT\*2040

### **MBG\*3200 Genetics: Our Uncertain Heritage F (3-0) [0.50]**

An examination of the ethical, social, and political issues arising from genetic manipulation, reproductive intervention and biotechnology through the joint application of principles of modern genetics and moral philosophy. Topics include eugenics, cloning, surrogate parenting, abortion, gene therapy, DNA fingerprinting and genetic diagnosis. Related issues such as scientific freedom, access to genetic information and public policy are also considered. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*2000

### **MBG\*3350 Laboratory Methods in Molecular Biology I F,W (0-8) [0.75]**

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. Department of Molecular and Cellular Biology.

*Prerequisite(s):* BIOC\*2580, MBG\*2020

*Restriction(s):* Registration in the B.Sc. Major in Molecular Biology and Genetics, Biochemistry, Biochemistry (Co-op), Biomedical Toxicology, Biomedical Toxicology (Co-op) or instructor consent.

### **MBG\*3360 Laboratory Methods in Molecular Biology II W (0-8) [0.75]**

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 advanced agendas independently, and to diagnose and analyze experimental results obtained with these techniques. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*3350

*Restriction(s):* Instructor consent required.

### **MBG\*3600 Introduction to Genomics S,F (1.5-0) [0.25]**

Genomics is the analysis of the structures and functions of entire genomes, whose nucleotide sequences are now known in part or in entirety for many different organisms. This computer-based course will provide an introduction to the methodology and applicability of this new discipline. Department of Molecular and Cellular Biology. (Offered through distance education format only.)

*Prerequisite(s):* MBG\*2020

### **MBG\*4030 Animal Breeding Methods F (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. Integrates quantitative genetics with concepts of statistics, economics, biology and biotechnology and expands into development of practical breeding plans. Department of Animal and Poultry Science.

*Prerequisite(s):* MBG\*3060

### **MBG\*4040 Genetics and Molecular Biology of Development F (3-2) [0.50]**

An examination of the genetic mechanisms which specify organismic development. Molecular biology of determination and cell differentiation, homeotic genes, oncogenes, genetic control of morphogenesis and pattern formation. Application of embryo manipulation techniques in basic science and medicine. Department of Molecular and Cellular Biology. (Offered in odd-numbered years.)

*Prerequisite(s):* MBG\*2020

*Restriction(s):* MBG\*4070

### **MBG\*4070 Genetics and Molecular Biology of Development F (3-0) [0.50]**

Lecture portion only of MBG\*4040. (Offered in odd-numbered years.)

*Prerequisite(s):* MBG\*2020

*Restriction(s):* MBG\*4040

**MBG\*4080 Molecular Genetics F (3-0) [0.50]**

The chemical nature of genetic material, transcription and the control of gene expression. DNA cloning and the use of recombinant DNA molecules in modifying gene expression. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*2020

**MBG\*4160 Plant Breeding W (3-2) [0.50]**

Application of genetic principles to plant improvement. Topics include breeding objectives, mating systems, selection, testing and germplasm maintenance of horticultural and crop plants. Department of Plant Agriculture.

*Prerequisite(s):* [MBG\*2000 or (MBG\*3100, AGR\*2451/2 (for B.Sc.(Agr.) students only)], STAT\*2040

**MBG\*4200 Transmission Genetics F (3-0) [0.50]**

A critical review of genetic methodologies employed in higher eukaryotes and how formal genetic analysis can be integrated with molecular genetics in studying diverse biological research areas such as meiotic recombination, DNA repair, embryonic development, transposable elements and neurobiology. Department of Molecular and Cellular Biology. (Offered in even-numbered years.)

*Prerequisite(s):* MBG\*2000

*Equate(s):* MBG\*4060

**MBG\*4240 Applied Molecular Genetics W (3-0) [0.50]**

Molecular and cellular aspects of biotechnology. In vitro manipulations of animal and plant cells. Genetic engineering in eukaryotes and development of transgenic organisms. Methods of gene therapy and molecular biology of cancer and its treatment. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*2020

**MBG\*4270 DNA Replication, Recombination and Repair W (3-0) [0.50]**

This course will examine the DNA transactions that determine the structure of the 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, developmentally-regulated changes in gene structure, inherited and somatic genetic diseases arising from abnormal DNA metabolism, and DNA sequence changes and chromosome alterations in evolution. Department of Molecular and Cellular Biology. (Offered in odd-numbered years.)

*Prerequisite(s):* MBG\*2020

**MBG\*4300 Plant Molecular Genetics W (3-0) [0.50]**

Molecular genetics of plants. Topics include: plant genome diversity and synten; 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.

*Prerequisite(s):* MBG\*2020

**MBG\*4500 Research Project in Molecular Biology and Genetics I S,F,W (0-12) [1.00]**

Independent theoretical and laboratory research on a topic in the discipline under the supervision of individual faculty. Students must make arrangements with both a faculty supervisor and the course coordinator prior to preregistration.

*Prerequisite(s):* MBG\*3350

*Restriction(s):* Registration in semester 7 or 8 of the B.Sc. program, Molecular Biology and Genetics major. Instructor consent required.

**MBG\*4510 Research Project in Molecular Biology and Genetics II S,F,W (0-12) [1.00]**

Independent theoretical and laboratory research on a topic in the discipline under the supervision of individual faculty. Students must make arrangements with both a faculty supervisor and the course coordinator prior to preregistration.

*Prerequisite(s):* MBG\*4500

*Restriction(s):* Registration in semester 7 or 8 of the B.Sc. program, Molecular Biology and Genetics major. Instructor consent required.

**MBG\*4600 Topics in Molecular Biology and Genetics S,F,W (1-3) [0.50]**

Independent study of a current topic in Molecular Biology and Genetics, selected from the recent research literature and involving a review and critical appraisal of underlying experimental principles. The course comprises independent library research, participation in weekly meetings, and written and oral presentations. Students must make arrangements with both faculty supervisor and the course coordinator in a prior course selection period. Open to students in semesters 6, 7, and 8 of the B.Sc. Major in Molecular Biology and Genetics. Department of Molecular and Cellular Biology.

*Prerequisite(s):* MBG\*3350

*Restriction(s):* MBG\*4500, MBG\*4510, MICR\*4240. Instructor consent required.

## Music

*School of Fine Art and Music*

### Ensembles

*Chamber Music*

*Choir (Symphonic Choir, Chamber Choir, Siren-Women's Choir)*

*Concert Winds*

*Contemporary Music Ensemble*

*Early Music Ensemble*

*Jazz Band*

*Orchestra*

**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. Auditions are held prior to the first day of classes each semester. In order to continue to the 2000 level of Applied Music, students must be in a Music program (honours major or minor, or general).*

*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-audition 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.*

**Topics Courses:** *The School will normally offer a "Topics" course each Fall and Winter. See courses MUSC\*3800 to MUSC\*3870. Please consult the School of Fine Art and Music for specific titles of courses to be offered.*

### **MUSC\*1060 Introduction to Music F,W (3-0) [0.50]**

An introductory course intended for students with NO previous experience in music. The main concepts and terminology of music from the Medieval period through the 20th-century will be explored in connection with the study of selected musical works. (Also offered through distance education format.)

*Restriction(s):* MUSC\*2600, MUSC\*2610, MUSC\*2620, MUSC\*3630

### **MUSC\*1090 Physics of Music W (3-0) [0.50]**

A course 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. (Also listed as PHYS\*1810.) (Offered in even-numbered years.)

*Restriction(s):* PHYS\*1810; students who have standing in any other 1000 level Physics course (except PHYS\*1020 or PHYS\*1600) may enrol in this only if they are completing an honours or general program in Music, in which case permission of the instructor is required.

### **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. (Offered through distance education format only.)

*Equate(s):* MUSC\*1120

*Restriction(s):* MUSC\*1180

### **MUSC\*1180 Musicianship I F,W (2-2) [0.50]**

Ear training through dictation and sight-singing exercises; C clefs; elementary improvisation and harmonization.

### **MUSC\*1250 Melody and Counterpoint W (3-0) [0.50]**

An introduction to the linear aspects of music through the study of melody, species counterpoint, and figured bass.

*Prerequisite(s):* 1 of MUSC\*1120, MUSC\*1130, MUSC\*1180, MUSC\*2180, instructor consent required.

### **MUSC\*1500 Applied Music I F,W (1-6) [0.50]**

Individual instruction in the technical and stylistic aspects of artistic solo instrumental or vocal 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.

### **MUSC\*1510 Applied Music II S,F,W (1-6) [0.50]**

A continuation of MUSC\*1500.

*Prerequisite(s):* A minimum grade of 70% in MUSC\*1500.

### **MUSC\*2010 The Musical Avant-Garde F (3-0) [0.50]**

An introduction to the avant-garde musical life of the 20th century including the works of Debussy, Stravinsky, Satie, Schoenberg, Cage, Cowell, and others.

*Restriction(s):* MUSC\*3630

### **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. (Offered in odd-numbered years.)

### **MUSC\*2100 Creating Music on the Computer S,F,W (6-0) [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 or MUSC\*2180. Some computer experience is recommended.

### **MUSC\*2110 Music of the Circum-Atlantic and the Americas F (3-0) [0.50]**

This course offers an ethnomusicological examination of the musical life of West and Central Africa, the Caribbean, and the Americas. (Offered in even-numbered years.)

*Restriction(s):* MUSC\*2350

### **MUSC\*2140 History of Jazz F (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. (Also offered through distance education format.)

### **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.

### **MUSC\*2180 Musicianship II F,W (2-2) [0.50]**

A continuation of MUSC\*1180.

*Prerequisite(s):* MUSC\*1180

### **MUSC\*2200 Music of the Near and Far East W (3-0) [0.50]**

An ethnomusicological examination of the musical life of the Islamic world, South Asia, Indonesia, and the Far East. (Offered in even-numbered years.)

*Equate(s):* MUSC\*2350

### **MUSC\*2220 Electronica: 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.

### **MUSC\*2280 Masterworks of Music F,W (0-10) [0.50]**

Selected musical works from 1600 to the present will be studied with reference to the historical, literary, and artistic milieu in which they were written and performed. Previous familiarity with basic musical terminology and note reading is required. This is a web-based course. (Offered through distance education format only.)

### **MUSC\*2360 Tonal Harmony I F (3-0) [0.50]**

The study of diatonic harmony: triads, progression, secondary dominants, harmonization of melodies and basses; dissonance treatment; diatonic modulation.

*Prerequisite(s):* MUSC\*1250

*Equate(s):* MUSC\*2250

### **MUSC\*2370 Tonal Harmony II W (3-0) [0.50]**

A continuation of MUSC\*2360 which introduces chromatic harmonies (augmented and Neapolitan sixth chords), suspension chords, linear structures, and non-diatonic modulation.

*Prerequisite(s):* MUSC\*2360

*Equate(s):* MUSC\*2250

<b>MUSC*2500 Applied Music III S,F,W (1-6) [0.50]</b>
A continuation of MUSC*1510. <i>Prerequisite(s):</i> (MUSC*1180 or MUSC*2180), a minimum grade of 70% in MUSC*1510. (MUSC*1180 or MUSC*2180 may be taken as corequisite) <i>Restriction(s):</i> Registration in a Music specialization.
<b>MUSC*2510 Applied Music IV S,F,W (1-6) [0.50]</b>
A continuation of MUSC*2500. <i>Prerequisite(s):</i> A minimum grade of 70% in MUSC*2500, (1 of MUSC*2600, MUSC*2610, MUSC*2620). <i>Restriction(s):</i> Registration in a Music specialization.
<b>MUSC*2530 Instrumental Ensembles I F,W (0-2) [0.25]</b>
The study and performance of selected instrumental music through participation in one of the School's ensembles: the University of Guelph Orchestra, Concert Winds, Contemporary Music Ensemble, Jazz Band, Contemporary Music Ensemble, or the Early Music 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. <i>Restriction(s):</i> Successful completion of an audition. Instructor consent required.
<b>MUSC*2540 Instrumental Ensembles II F,W (0-2) [0.25]</b>
A continuation of MUSC*2530. <i>Prerequisite(s):</i> MUSC*2530 <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*2550 Choral Ensembles I F,W (0-2) [0.25]</b>
The study and performance of selected choral literature through participation in one of the School's ensembles; the University of Guelph Symphonic Choir, the Chamber Choir, or Siren. 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. <i>Equate(s):</i> MUSC*2520 <i>Restriction(s):</i> Successful completion of an audition. Instructor consent required.
<b>MUSC*2560 Choral Ensembles II F,W (0-2) [0.25]</b>
A continuation of MUSC*2550. <i>Prerequisite(s):</i> MUSC*2550 <i>Equate(s):</i> MUSC*2520 <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*2570 Keyboard Accompaniment I F,W (0-2) [0.25]</b>
Development of sight-reading and accompaniment skills for pianists in close coordination with vocal and instrumental applied music students. <i>Prerequisite(s):</i> MUSC*2510 <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*2580 Keyboard Accompaniment II F,W (0-2) [0.25]</b>
A continuation of MUSC*2570. <i>Prerequisite(s):</i> MUSC*2570
<b>MUSC*2600 Music History: Chant to Josquin F (3-0) [0.50]</b>
A survey of the history of music from chant to the mid-Renaissance. Principal genres and composers from the pre-Christian era to Josquin will be studied. <i>Prerequisite(s):</i> 1 of MUSC*1120 , MUSC*1130, MUSC*1180, MUSC*2180 <i>Equate(s):</i> MUSC*2160
<b>MUSC*2610 Music History: The Reformation to J.S. Bach W (3-0) [0.50]</b>
A survey of the history of music from the mid-16th century to the end of the Baroque era. Principal genres and composers from the beginning of the Italian madrigal to J.S. Bach will be studied. <i>Prerequisite(s):</i> 1 of MUSC*1120 , MUSC*1130, MUSC*1180, MUSC*2180 <i>Equate(s):</i> MUSC*2160

<b>MUSC*2620 Music History: Classical and Romantic Eras F (3-0) [0.50]</b>
A survey of the history of music from the classical era to the late 19th century. Principal genres and composers from C.P.E. Bach to Brahms and Wagner will be studied. <i>Prerequisite(s):</i> 1 of MUSC*1120 , MUSC*1130, MUSC*1180, MUSC*2180 <i>Equate(s):</i> MUSC*2170
<b>MUSC*3020 Tonal Analysis F (3-0) [0.50]</b>
A systematic approach to the principles of reductive analysis of tonal music as they are expressed in the theories of Heinrich Schenker. Introduction of graphic notation. (Offered in even-numbered years.) <i>Prerequisite(s):</i> MUSC*2370
<b>MUSC*3030 Post-tonal Analysis W (3-0) [0.50]</b>
Advanced theoretical consideration of the structure of atonal and 12-tone music. Set theory and other mathematical models. (Offered in even-numbered years.) <i>Prerequisite(s):</i> MUSC*2370, MUSC*3630
<b>MUSC*3150 Music in London F (3-0) [0.50]</b>
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. <i>Restriction(s):</i> Admission to the London Semester.
<b>MUSC*3290 Musicianship III F (3-0) [0.50]</b>
A study of the fundamentals of conducting techniques. Emphasis on practical application to choral and instrumental organizations; score reading and analysis and interpretation of literature. (Offered in odd-numbered years.) <i>Prerequisite(s):</i> (MUSC*2180, MUSC*2360) or permission of the instructor <i>Equate(s):</i> MUSC*2290
<b>MUSC*3500 Applied Music V S,F,W (1-6) [0.50]</b>
A continuation of MUSC*2510; restricted to students in a Music program (honours major or minor or general, area of concentration). <i>Prerequisite(s):</i> 3.00 credits in music courses including a minimum grade of 70% in MUSC*2510 <i>Restriction(s):</i> Registration in a Music program (honours major or minor or general, area of concentration)
<b>MUSC*3510 Applied Music IV S,F,W (1-6) [0.50]</b>
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). <i>Prerequisite(s):</i> 4.00 credits in music courses including a minimum grade of 70% in MUSC*3500 <i>Restriction(s):</i> Registration in a Music program (honours major or minor or general, area of concentration)
<b>MUSC*3550 Advanced Music Ensemble I F,W (0-3) [0.25]</b>
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 the proposal to the Director of the School of Fine Art and Music for approval by the last day of course selection in Fall (for Winter) or Winter (for the following Fall). A form is available from the School office for this purpose. <i>Prerequisite(s):</i> MUSC*2500, (2 of MUSC*2530, MUSC*2540, MUSC*2550, MUSC*2560) <i>Restriction(s):</i> Registration in a Music Program (honours major or minor or general, area of concentration). Instructor consent required.
<b>MUSC*3560 Advanced Music Ensemble II F,W (0-3) [0.25]</b>
A continuation of MUSC*3550. <i>Prerequisite(s):</i> MUSC*3550 <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*3630 20th Century Music F (3-0) [0.50]</b>
This course examines music from the late 19th century (Debussy and post-romantic composers) to the present from both historical and theoretical perspectives. <i>Prerequisite(s):</i> MUSC*2370 , MUSC*2620 <i>Restriction(s):</i> MUSC*2630

<b>MUSC*3740 Issues in Popular Music Studies W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> 1 of MUSC*1120 , MUSC*1130, MUSC*1180, MUSC*2180
<b>MUSC*3750 Popular Musics of the World W (3-0) [0.50]</b>
The major styles and genres of popular musics around the world, with an emphasis on musical style and its relationship to social processes. <i>Prerequisite(s):</i> (MUSC*1180 or MUSC*2180), MUSC*2150
<b>The following "topics" courses normally focus on current areas of faculty research, such as recent developments in jazz research, the reception of the music of Beethoven, the music of Gabriel Faure, improvisational studies, Lied and Art Song, Russian music and literature, and black music of the circum-Atlantic.</b>
<b>MUSC*3800 Topics in Music U (3-0) [0.50]</b>
A course which examines selected topics in music history, performance practice, analysis, and music within its cultural context. <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*3810 Topics in Music U (3-0) [0.50]</b>
A course which examines selected topics in music history, performance practice, analysis, and music within its cultural context. <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*3820 Topics in Ethnomusicology U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> MUSC*2110 or MUSC*2200
<b>MUSC*3830 Topics in Ethnomusicology U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> MUSC*2110 or MUSC*2200
<b>MUSC*3840 Topics in Music Theory U (3-0) [0.50]</b>
An analytical investigation of a selected topic in music. Topics will rotate on an annual basis and may include advanced theoretical study of Western art music as well as jazz theory. <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*3850 Topics in Music Theory U (3-0) [0.50]</b>
An analytical investigation of a selected topic in music. Topics will rotate on an annual basis and may include advanced theoretical study of Western art music as well as jazz theory. <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*3860 Topics in Digital Music U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> MUSC*2100, (MUSC*2010 or MUSC*2220)
<b>MUSC*3870 Topics in Digital Music U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> MUSC*2100, (MUSC*2010 or MUSC*2220)
<b>MUSC*4200 Directed Readings I F,W (3-0) [0.50]</b>
A reading course designed to enable the student to investigate a topic in music not otherwise available in the curriculum. The student will design a course of readings and assignments with the instructor and submit the proposal to the Director of the School of Fine Art and Music for approval by the last day of course selection in Fall (for Winter) or Winter (for the following Fall). <i>Prerequisite(s):</i> Completion of the music core. <i>Restriction(s):</i> Instructor consent required.

<b>MUSC*4210 Directed Readings II F,W (3-0) [0.50]</b>
Same course description as MUSC*4200. <i>Prerequisite(s):</i> Completion of the music core. <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*4240 Experiential Learning in Music F,W (3-0) [0.50]</b>
This experiential learning option provides qualified undergraduate students with an opportunity to design an independent program that integrates academic study, such as readings or assignments, with off-campus work or performance (paid or volunteer). Written proposals, signed by the 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). <i>Prerequisite(s):</i> 3.00 credits in Music <i>Restriction(s):</i> Instructor consent required.
<b>MUSC*4401 Honours Music Project S,F,W (3-0) [0.50]</b>
First part of the two-semester course MUSC*4401/2. Refer to MUSC*4401/2 for course description. <i>Prerequisite(s):</i> Completion of the music core. <i>Restriction(s):</i> Permission of the School and registration in an honours major in music (students who wish to propose a recital must also have completed MUSC*3510 with a minimum grade of 80%).
<b>MUSC*4401/2 Honours Music Project S-F,F-W,W-S [1.00]</b>
Preparation of a major theoretical or historical paper or presentation of a full-length recital. Projects are subject to approval of the School, and must be submitted to the Director, on school forms, by the last day of course selection in the previous semester. This is a two-semester course offered over consecutive semesters. When you select it you must select MUSC*4401 in the first semester and MUSC*4402 in the second semester. A grade will not be assigned to MUSC*4401 until MUSC*4402 has been completed. <i>Prerequisite(s):</i> Completion of the music core. <i>Restriction(s):</i> Permission of the School and registration in an honours major in music (students who wish to propose a recital must also have completed MUSC*3510 with a minimum grade of 80%).
<b>MUSC*4402 Honours Music Project S,F,W (3-0) [0.50]</b>
Second part of the two-semester course MUSC*4401/2. Refer to MUSC*4401/2 for course description. <i>Prerequisite(s):</i> MUSC*4401

## Nutrition

*Department of Animal and Poultry Science*

*Department of Family Relations and Applied Nutrition*

*Department of Human Health and Nutritional Sciences*

### **NUTR\*1010 Nutrition and Society F,W (3-0) [0.50]**

The significance of nutrition in terms of individuals and societies throughout the world. Factors involved in the application of knowledge of nutritional needs and food selection. Department of Family Relations and Applied Nutrition. (Also offered through distance education format.)

### **NUTR\*2050 Family and Community Nutrition F (3-0) [0.50]**

Nutritional needs through the life cycle and their significance in family and community health. Department of Family Relations and Applied Nutrition.(Also offered through distance education format.)

*Prerequisite(s):* NUTR\*1010

*Restriction(s):* NUTR\*3010

### **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. The course is taught by the Department of Food Science. (Also listed as FOOD\*2150.)

*Prerequisite(s):* BIOL\*1040, (CHEM\*1040 or CHEM\*1300)

*Equate(s):* FOOD\*2150

*Restriction(s):* AGR\*3330, FOOD\*2010, FOOD\*3070. Not available to students registered in Applied Human Nutrition major.

### **NUTR\*3040 Clinical Nutrition I W (3-0) [0.50]**

Epidemiology, pathophysiology, and role of nutrition in the prevention and management of several major chronic conditions including cardiovascular diseases, disorders of energy balance and diabetes mellitus, with emphasis on high risk individual management approaches. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* BIOM\*3100, BIOC\*3560, FRHD\*3070, NUTR\*2050, (NUTR\*3190 or NUTR\*3210), STAT\*2090

*Restriction(s):* Registration is limited to students registered in the Applied Human Nutrition Major.

### **NUTR\*3210 Fundamentals of Nutrition 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. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* BIOC\*2580

*Restriction(s):* NUTR\*3190

### **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. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

### **NUTR\*3390 Applied Nutritional and Nutraceutical Sciences I F (2-3) [0.50]**

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\*3190 or NUTR\*3210

*Restriction(s):* Registration in the Nutritional and Nutraceutical Sciences Major and the Nutritional Sciences and the Functional Food and Nutraceuticals Minors.

### **NUTR\*4010 Nutritional Assessment F (3-3) [0.75]**

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. Laboratories will provide the students with hands-on training of diet and anthropometric methods. Cases will be used to develop the understanding of the concepts discussed in lectures and expand on the ethical treatment of individual and group data. Significant independent learning will be required. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* NUTR\*2050, (NUTR\*3190 or NUTR\*3210)

*Restriction(s):* Registration in the 4th year of the Applied Human Nutrition Major.

### **NUTR\*4040 Clinical Nutrition II F (3-3) [0.75]**

A continuation of NUTR\*3040. This lecture and laboratory based course is concerned with the application of nutrition to clinical problems. 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. A case study based course. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* NUTR\*3040, BIOM\*3110

*Restriction(s):* Registration in the 4th year of the Applied Human Nutrition Major.

### **NUTR\*4070 Nutrition Education F (3-0) [0.50]**

Methods and approaches in nutrition education. Community programs in nutrition for different age groups; dietary counselling; nutrition education in the preschool, in prenatal and other specialized programs. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* FRHD\*3400, NUTR\*2050

*Restriction(s):* Registration in B.A.Sc. Program.

### **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. The course is co-operatively taught by the Department of Human Health and Nutritional Sciences and the Department of Food Science. (Also listed as FOOD\*4090.)

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

*Equate(s):* FOOD\*4090

### **NUTR\*4200 Nutrition and Immune Function W (3-0) [0.50]**

This course integrates existing knowledge in several areas - nutrition, metabolism and immunology. Of particular interest are the underlying mechanisms of nutritional immunomodulation with particular reference to the human problem of protein-energy malnutrition. Food sensitivities and the immunological functions of milk will also be considered. Department of Human Health and Nutritional Sciences. (Offered in odd-numbered years.)

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

### **NUTR\*4210 Nutrition, Exercise and Energy Metabolism F (3-0) [0.50]**

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. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* (NUTR\*3190 or NUTR\*3210), HK\*3940

### **NUTR\*4320 Nutrition and Metabolic Control of Disease W (3-0) [0.50]**

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. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

### **NUTR\*4330 Applied Nutritional and Nutraceutical Sciences II W (2-3) [0.50]**

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. Limited to students in Nutritional and Nutraceutical Sciences Major. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* (NUTR\*3190 or NUTR\*3210), NUTR\*3330, NUTR\*3390, HK\*3940

*Restriction(s):* Registration in B.Sc. Program (Nutritional & Nutraceutical Sciences major).

**NUTR\*4350 Current Issues F (3-0) [0.50]**

This course discusses controversial and/or emerging topics in Human Biology and Nutritional and Nutraceutical Sciences. Topics of current interest will be announced during the course selection period. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* ( NUTR\*3190 or NUTR\*3210), HK\*3940

*Restriction(s):* Instructor consent required.

**NUTR\*4360 Current Issues in Nutrigenomics W (3-0) [0.50]**

This course discusses controversial and/or emerging topics in Human Biology and Nutritional and Nutraceutical Sciences as it relates to nutrigenomics. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* ( NUTR\*3190 or NUTR\*3210), HK\*3940

**NUTR\*4510 Toxicology, Nutrition and Food F (3-0) [0.50]**

The role of foods, herbals 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. Assessing the risk of genetically modified foods and radioactive contamination of a food supply. Department of Human Health and Nutritional Sciences.

*Prerequisite(s):* NUTR\*3190 or NUTR\*3210

**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. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* FRHD\*3070, NUTR\*2050, NUTR\*3040

*Restriction(s):* Instructor consent required.

**NUTR\*4850 Field Experience in Nutrition Education W (2-4) [0.50]**

Supervised experience in nutrition education and 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. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* FRHD\*3400, NUTR\*4040, NUTR\*4070

*Restriction(s):* Instructor consent required.

**NUTR\*4900 Selected Topics in Human Nutrition W (3-0) [0.50]**

Reading and discussion on selected areas in human nutrition and its application; formal class reports and term papers. Primarily for Applied Human Nutrition majors. Department of Family Relations and Applied Nutrition.

*Prerequisite(s):* FRHD\*3070, NUTR\*3040, NUTR\*4010

*Restriction(s):* Registration in the 4th year of the Applied Human Nutrition Major.

**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

## Pathology

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*Department of Pathobiology*

*Additional course listings may be found in the course descriptions for Veterinary Medicine.*

<b>PATH*3610 Principles of Disease W (3-0) [0.50]</b>
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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. (Also offered through distance education format.)
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<i>Prerequisite(s):</i> 1.50 credits in biology
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<i>Restriction(s):</i> PATH*3600
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<b>PATH*4100 Diseases of Aquatic Animals F (2-2) [0.50]</b>
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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.
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<i>Prerequisite(s):</i> 1.50 credits in biology
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## Pharmacology

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*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.*

## 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 5.00 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\*4320, 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 Introductory Philosophy: Major Texts F,W (3-0) [0.50]

An introduction to philosophy through primary texts in the history of philosophy, with emphasis upon traditional topics such as the nature of knowledge and the different types of knowledge, the relationship between the mind and the body, the nature of good and evil, and the nature of sound argument.

#### PHIL\*1010 Introductory Philosophy: Social and Political Issues F,W (3-0) [0.50]

An introduction to philosophy, with particular emphasis upon important problems facing society today, such as punishment, animal rights, discrimination, war and violence, equality and property and the market as a value system. Some consideration of the elements of argumentation will also occur.

#### PHIL\*1050 Introductory Philosophy: Basic Problems F,W (3-0) [0.50]

An introduction 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. Some consideration of the elements of argumentation will also occur.

#### PHIL\*2030 Philosophy of Medicine F,W (3-0) [0.50]

An examination of philosophical and ethical issues that arise in human and veterinary medicine, including such topics as the definitions of disease and health, the status of medicine as a science, the role of values in medical research and medical practice, the doctor-patient relationship, psychiatry and the control of human behaviour, and the ethics of genetic counselling.

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2060 Philosophy of Feminism I W (3-0) [0.50]

An examination of 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.

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2070 Philosophy of the Environment W (3-0) [0.50]

A critical examination of a variety of current ways of thinking about the environment, aimed at developing a satisfactory philosophical approach, especially from an ethical perspective. (Also offered through distance education format.)

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2100 Critical Thinking F,W (3-0) [0.50]

A course 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):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2110 Elementary Symbolic Logic W (3-0) [0.50]

A study of 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):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2120 Ethics F,W (3-0) [0.50]

An examination of competing ethical theories (subjectivism, intuitionism, relativism, utilitarianism, egoism, deontology) with a view to assessing their theoretical value as well as their ability to provide practical guidance and to resolve moral dilemmas. (Also offered through distance education format.)

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2130 Philosophy of Religion F (3-0) [0.50]

A consideration of various philosophical questions concerning religion, such as arguments for the existence of God, the problem of evil, the meaning of religious language, the significance of mystical experience, human immortality. (Offered in odd-numbered years.)

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2140 History of Greek and Roman Philosophy F (3-0) [0.50]

A survey of Western philosophy from the Pre-Socratics (6th-century, B.C.) to Plotinus (3rd century, A.D.).

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2160 Modern European Philosophy to Hume W (3-0) [0.50]

A survey of European philosophy from the Renaissance (15th-century) to David Hume (mid-18th century).

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2170 Existentialism W (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 representatives, which may include Kierkegaard, Sartre, de Beauvoir, Camus and others.

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2180 Philosophy of Science F (3-0) [0.50]

An examination of competing theories concerning the nature of science and its modes of inquiry, and the relationship between theories and data and between scientific knowledge and reality. The central problem of the course is the rational basis of scientific knowledge.

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2220 Philosophy and Literary Art F (3-0) [0.50]

The course will engage with literary art forms (fiction, drama, poetry, and film) for philosophical goals. Possible emphases include the use of literary works to express philosophical topics; philosophical investigations of the nature of literary art forms; and philosophies of interpretation of such art forms (e.g., classical poetics, hermeneutics, deconstruction, analytical aesthetics).

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2350 Selected Topics in Philosophy I U (3-0) [0.50]

The topics for this course will vary from one offering to the next, and will deal with material not available in regular courses. Students are advised to consult a departmental advisor before registering.

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2370 Introduction to Metaphysics W (3-0) [0.50]

A study of 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):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*2600 Business and Professional Ethics W (3-0) [0.50]

An examination of ethical and evaluative issues relating to business and professional practices. 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. Intended for students registered in a science or professional program, but without a background in philosophy.

*Prerequisite(s):* 5.00 credits or 1 of PHIL\*1000, PHIL\*1010, PHIL\*1050

#### PHIL\*3040 Philosophy of Law F (3-0) [0.50]

An examination of philosophical theories concerning the nature of law and morality. 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

<b>PHIL*3050 Philosophy of Art W (3-0) [0.50]</b>
A consideration of 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.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*3060 Medieval Philosophy W (3-0) [0.50]</b>
A study of philosophy from the Patristic period (3rd century A.D.) to the early Renaissance (14th-century). The ideas of the central figures will be examined through original sources. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 1.50 credits in philosophy
<b>PHIL*3080 History of Modern European Philosophy from Kant F (3-0) [0.50]</b>
A survey of European philosophy from Immanuel Kant (mid-18th century) to the late 19th century.
<i>Prerequisite(s):</i> 1.50 credits in philosophy
<b>PHIL*3090 Philosophy of Kant W (3-0) [0.50]</b>
Kant revolutionized the philosophical tradition of investigating objectivity (asking what the nature of reality is, in itself) by investigating subjectivity (asking how knowledge is possible for us). This course will typically examine one of Kant's Critiques and/or a central philosophical theme that appears in Kant's works.
<i>Prerequisite(s):</i> 1.50 credits in philosophy
<b>PHIL*3130 Contemporary British and American Philosophy F (3-0) [0.50]</b>
A survey of philosophical movements mainly centred in Britain and America from the late 19th-century to the present.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*3170 Intermediate Philosophy of Science W (3-0) [0.50]</b>
A study of more specialized questions posed by the nature of science and its investigation. Topics may include realism and antirealism, naturalized explanations, and other contemporary problems in the philosophy of science.
<i>Prerequisite(s):</i> PHIL*2180
<b>PHIL*3180 Philosophy of Mind W (3-0) [0.50]</b>
A philosophical examination of fundamental theories and problems concerned with mind, thought, and consciousness.
<i>Prerequisite(s):</i> 1.50 credits in philosophy
<b>PHIL*3190 Theory of Knowledge I F (3-0) [0.50]</b>
A survey of traditional discussion of the problems of knowledge.
<i>Prerequisite(s):</i> 1.50 credits in philosophy
<b>PHIL*3200 Contemporary European Philosophy W (3-0) [0.50]</b>
A survey of philosophical movements mainly centred in continental Europe from the late 19th-century to the present.
<i>Prerequisite(s):</i> 1.50 credits in philosophy
<b>PHIL*3210 Women in the History of Philosophy F (3-0) [0.50]</b>
This course will examine selected works of women philosophers and their contributions to the major philosophical debates of their day.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*3230 Issues in Social and Political Philosophy W (3-0) [0.50]</b>
A detailed examination of one or more historical or contemporary treatments of specific issues in social or political philosophy, such as: war and peace, justice, rights, social science, culture, education.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*3240 Philosophy of Technology F (3-0) [0.50]</b>
This course examines the philosophical problems associated with technology. Topics may include the nature of technology, the relation between technology and science, and the various critiques of technology - religious, political, ethical and existentialist - in contemporary society.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits.
<b>PHIL*3250 Philosophy of Language F (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits

<b>PHIL*3350 Selected Topics in Philosophy II U (3-0) [0.50]</b>
The topics for this course will vary from one offering to the next, and will deal with material not available in regular courses, such as Philosophy of History, Philosophy of Social Science and advanced Philosophy of Religion. Students are advised to consult an academic counsellor before registering.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*3410 Major Texts in the History of Philosophy W (3-0) [0.50]</b>
A study of central primary sources in ancient, medieval, early modern or nineteenth-century philosophy. The readings and periods stressed will vary from year to year. Students should consult with the department as to topics to be dealt with in each offering. Specific topics offered will be announced prior to the course selection period.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*3420 Philosophical Problems of Religion F (3-0) [0.50]</b>
A detailed examination of major problems and writings in the philosophy of religion. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 1.50 credits in philosophy, including one of PHIL*2130, PHIL*3910, PHIL*3920
<b>PHIL*3910 Indian Philosophy F (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<i>Restriction(s):</i> PHIL*2910
<b>PHIL*3920 Chinese Philosophy W (3-0) [0.50]</b>
An analysis of selected primary sources of Chinese philosophy, in translation, from the I 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.
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<i>Restriction(s):</i> PHIL*2920
<b>PHIL*3930 African Philosophy F (3-0) [0.50]</b>
An introduction to the philosophical traditions of Africa, part historical and part contemporary. The shorter historical section will cover some themes from the thought of ancient Egypt, early Christian and Islamic philosophy in North Africa and precolonial traditions from West Africa. The greater section of the course will deal with philosophical movements in Africa since the 1960's, as well as their implications for African American thought and philosophy generally. (Offered in even-numbered years.)
<i>Prerequisite(s):</i> 1.50 credits in philosophy or 7.50 credits
<b>PHIL*4060 Philosophy of Feminism II F (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> 1.00 credits in philosophy at the 3000 level or PHIL*2060
<b>PHIL*4110 Symbolic Logic U (3-0) [0.50]</b>
A study of issues and techniques beyond the level of elementary sentential logic and quantification. A consideration of some topics in logical theory. An extension of material explored in PHIL*2110, with special focus on philosophical aspects or implications of formal logic.
<i>Prerequisite(s):</i> PHIL*2110, 1.00 credits in philosophy at the 3000 level
<b>PHIL*4230 Social and Political Philosophy U (3-0) [0.50]</b>
This is an advanced level course that examines in detail selected historical or contemporary treatments of specific issues in social and political philosophy.
<i>Prerequisite(s):</i> PHIL*2120 or PHIL*3230, 1.00 credits in philosophy at the 3000 level
<b>PHIL*4270 Current Philosophical Issues U (3-0) [0.50]</b>
A study of primary philosophical texts since 1965. The focus of the course will alternate between analytic texts and issues and continental texts and issues.
<i>Prerequisite(s):</i> 2.00 credits in philosophy including 1.00 at the 3000 level
<b>PHIL*4310 Applied Ethics U (3-0) [0.50]</b>
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.
<b>PHIL*4340 Ethics U (3-0) [0.50]</b>
An advanced study of problems in contemporary ethics.
<i>Prerequisite(s):</i> PHIL*2120, 1.00 credits in Philosophy at the 3000 level

**PHIL\*4360 Theory of Knowledge II 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):* 2.50 credits in philosophy or PHIL\*3190

**PHIL\*4370 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

**PHIL\*4390 Selected Topics in Philosophy III U (3-0) [0.50]**

Open to honours philosophy students in their 7th and 8th semesters.

*Prerequisite(s):* 1.00 credits in philosophy at the 3000 level

**PHIL\*4400 Major Texts in Philosophy U (3-0) [0.50]**

Advanced study of a major text in philosophy not treated in either PHIL\*4410 or PHIL\*4420.

*Prerequisite(s):* 1.00 credits in philosophy at the 3000 level

**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

**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

**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.

## Physics

### Department of Physics

#### PHYS\*1000 An Introduction to Mechanics F (3-3) [0.50]

A course for physical science students which develops the concepts of mechanics as applied to translational and rotational kinematics and dynamics, equilibrium of rigid bodies, oscillations, gravitation, special relativity, and fluid statics and dynamics. Normally this is part of the two-course unit PHYS\*1000 and PHYS\*1010.

*Prerequisite(s):* [1 of 4U Physics, OAC (or equivalent) Physics, PHYS\*1020], 4U or OAC (or equivalent) Calculus

*Restriction(s):* PHYS\*1080, PHYS\*1110

#### PHYS\*1010 Introductory Electricity and Magnetism W (3-3) [0.50]

A course for physical science students on the phenomena of electromagnetism. Topics include electric charges and fields, electric potential, magnetic fields, waves and electric circuits. Normally this is part of the two-course unit PHYS\*1000 and PHYS\*1010.

*Prerequisite(s):* (MATH\*1080 or MATH\*1200), (1 of 4U Physics, OAC Physics, PHYS\*1020)

#### PHYS\*1020 Introductory Physics F,W (3-2) [0.50]

A course stressing the fundamental properties of particles and waves, designed for students without OAC Physics or equivalent. Topics include: the motion of particles, force, field, momentum, energy and associated conservation laws; basic interactions between particles; properties of waves. It is expected that students will have completed Grade 12 or 3U Physics and at least 1 OAC or 4U mathematics credit. This course is intended only for students who require the equivalent of 4U or OAC Physics in order to proceed to PHYS\*1000, PHYS\*1010, PHYS\*1070, PHYS\*1080, PHYS\*1110, PHYS\*1130, PHYS\*2040. Students may not take this course for credit if they have passed 4U or OAC Physics (or equivalent). (Also offered through distance education format.)

#### PHYS\*1070 Introductory Physics for Life Sciences F,W (3-3) [0.50]

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):* (1 of 4U Physics, OAC Physics, PHYS\*1020), one 4U or OAC Mathematics course

*Restriction(s):* PHYS\*1130

#### PHYS\*1080 Physics for Life Sciences F,W (3-3) [0.50]

A course complementary to PHYS\*1070 or PHYS\*1130 with emphasis on some aspects of classical physics important 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, OAC Physics, PHYS\*1020), one 4U or OAC Mathematics course

*Restriction(s):* PHYS\*1000, PHYS\*1110

#### PHYS\*1130 Physics with Applications W (3-3) [0.50]

This course is for engineering and environmental science students, and uses some calculus in analytic problem-solving. Topics include simple harmonic motion, waves, acoustics, optics, properties and absorption of electromagnetic radiation, blackbody radiation, solar spectrum and flux, electric field and potential, DC circuits, power transmission, nuclear processes, and radioactivity.

*Prerequisite(s):* (MATH\*1080 or MATH\*1200), [1 of 4U Physics, OAC Physics (or equivalent), PHYS\*1020]

*Restriction(s):* PHYS\*1070

#### PHYS\*1600 Contemporary Astronomy S,F (3-0) [0.50]

A course designed for arts and social 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. Students with a credit in any Physics course except PHYS\*1020, PHYS\*1810 may not take this course. (Also offered through distance education format.)

*Restriction(s):* Students with standing in any other 1000 level course credit in physics (except PHYS\*1020, PHYS\*1810) may not use this course for credit.

#### PHYS\*1810 Physics of Music W (3-0) [0.50]

A course 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. Students who have standing in any other 1000 level physics course, except PHYS\*1020 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. (Also listed as MUSC\*1090.) (Offered in even-numbered years.)

*Equate(s):* MUSC\*1090

#### 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):* IPS\*1220 or 1.00 credits in physics (excluding PHYS\*1020, PHYS\*1600, PHYS\*1810)

#### PHYS\*2040 Fundamental Electronics and Sensors W (3-3) [0.50]

An introduction to modern electronics. Topics covered include DC and AC circuit analysis, digital circuits, analog circuits with emphasis on operational amplifiers and analog-to-digital and digital-to-analog conversion. Applications include the interfacing of various sensors to measure physical parameters.

*Prerequisite(s):* 0.50 credits in university level calculus, (1 of 4U Physics, OAC Physics, PHYS\*1020)

#### PHYS\*2260 Experimental Basis of Quantum Physics S,W (3-0) [0.50]

The course investigates and describes the properties of atoms, nuclei and elementary particles in terms of phenomena of modern physics. Topics include wave properties of matter, particle properties of electromagnetic radiation, uncertainty principle, elementary angular momentum, spin and elementary quantum mechanics.

*Prerequisite(s):* (1 of MATH\*1000, MATH\*1080, MATH\*1200, IPS\*1110), (1 of IPS\*1220, PHYS\*1010, PHYS\*2460)

#### PHYS\*2440 Mechanics I F (3-3) [0.75]

This course and the following one, PHYS\*2450, continue building the foundation in mechanics begun in the first year. These courses are intended for students proceeding to advanced studies in the physical sciences. Topics include analysis of experimental uncertainties (errors), one, two and three dimensional motion, damped and forced harmonic oscillator, gravitation and orbital motion. The laboratory work requires a formal treatment of error analysis, as well as computer programming for data analysis.

*Prerequisite(s):* (1 of MATH\*1210+, MATH\*2080, IPS\*1210+), (1 of IPS\*1220+, PHYS\*1000+, PHYS\*1080, PHYS\*1110) (+preferred)

#### PHYS\*2450 Mechanics II W (3-3) [0.75]

This course is a continuation of PHYS\*2440. Topics include special relativity, noninertial reference frames, dynamics of systems of particles, and rigid body dynamics.

*Prerequisite(s):* PHYS\*2440

#### PHYS\*2460 Electricity and Magnetism I F (3-3) [0.75]

This course and the following one, PHYS\*2470, continue building the foundation in electricity and magnetism begun in the first year. These two courses are 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. The laboratory work requires a formal treatment of error analysis, as well as computer programming for data analysis.

*Prerequisite(s):* (1 of IPS\*1220+, PHYS\*1010+, PHYS\*1070, PHYS\*1130), (1 of MATH\*1210+, MATH\*2080, IPS\*1210+) (+preferred)

*Co-requisite(s):* PHYS\*2440

#### PHYS\*2470 Electricity and Magnetism II W (3-3) [0.75]

This course is a continuation of PHYS\*2460. Topics include magnetic forces and fields, the Biot-Savart equation, Ampere's Law, magnetic induction, LRC transients, A.C. circuits and magnetic materials.

*Prerequisite(s):* PHYS\*2460

#### PHYS\*2550 Radiation and the Environment F (3-0) [0.50]

This course reviews radiations which occur in the environment and their effects on materials and living systems. These include x-radiation, ultraviolet, visible, infrared, microwave and radio-frequency emissions; acoustical and ultrasonic radiation; and alpha, beta, and gamma radiation from radioactive material. (Offered in even-numbered years.)

*Prerequisite(s):* (1 of IPS\*1220, PHYS\*1010, PHYS\*1070, PHYS\*1130), 0.50 credits in mathematics at the 1000 level (excluding MATH\*1050)

<b>PHYS*2600 General Astronomy S,F (3-2) [0.50]</b>
An introduction to astronomy: the solar system, the sun, stellar and galactic structure. (Offered in the Fall semester in odd-numbered years.) <i>Prerequisite(s):</i> 0.50 credits in physics at the 1000 level (excluding PHYS*1600, PHYS*1810), 0.50 credit in mathematics at the 1000 level
<b>PHYS*3080 Energy W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> 0.50 credits in physics at the 1000 level (excluding PHYS*1020, PHYS*1600, PHYS*1810), 0.50 credits in mathematics at the 1000 level (excluding MATH*1050)
<b>PHYS*3100 Electronics F (3-3) [0.75]</b>
Topics include: amplifier properties; signal processing using operational amplifiers; introduction to digital electronics, including counters and registers; circuits to convert analog signals to digital and vice-versa; introduction to the physics of semiconductor devices. The laboratory illustrates lecture topics, and a major component consists of techniques to interface a computer to integrated circuits for data acquisition. <i>Prerequisite(s):</i> PHYS*2470
<b>PHYS*3220 Waves and Optics W (3-0) [0.50]</b>
Standing and travelling waves; normal modes; Fourier series; optics including polarization, interference and diffraction. <i>Prerequisite(s):</i> PHYS*2440
<b>PHYS*3230 Quantum Mechanics I F (3-0) [0.50]</b>
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, hydrogen atom. <i>Prerequisite(s):</i> (CHEM*2070 or PHYS*2260), MATH*2160, (MATH*2170 or MATH*2270), PHYS*2470
<b>PHYS*3240 Statistical Physics I S,F (3-0) [0.50]</b>
Introduction to statistical physics including thermodynamics and statistical mechanics of equilibrium phenomena. <i>Prerequisite(s):</i> MATH*2200, (PHYS*2260 or PHYS*2440)
<b>PHYS*3400 Advanced Mechanics W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> (MATH*2170 or MATH*2270), PHYS*2450
<b>PHYS*3510 Intermediate Laboratory W (0-6) [0.50]</b>
A modular course for physics students including modern and classical physics experiments. Modules include laboratory instrumentation employing computers, modern physics, waves and optics, molecular physics, biophysics, and solid state physics. <i>Prerequisite(s):</i> PHYS*2450, PHYS*3100
<b>PHYS*4040 Quantum Mechanics II W (3-0) [0.50]</b>
A second course in quantum mechanics. Topics include spin, linear vector spaces, two-level systems, quantum dynamics, rotations and angular momentum, time dependent perturbation theory, Born approximation. <i>Prerequisite(s):</i> PHYS*3230
<b>PHYS*4120 Atomic and Molecular Physics F (3-0) [0.50]</b>
The application of quantum theory to atomic and molecular structure, and the interaction between electromagnetic radiation and atoms and simple molecules. <i>Prerequisite(s):</i> PHYS*3240, PHYS*4040
<b>PHYS*4130 Subatomic Physics W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> PHYS*3230
<b>PHYS*4150 Solid State Physics W (3-0) [0.50]</b>
Bonding in solids, thermal and electrical properties of solids, energy bands, imperfections in solids, properties of semiconductors and insulators. <i>Prerequisite(s):</i> PHYS*3220, PHYS*3230, PHYS*3240 Recommended: PHYS*4240 <i>Co-requisite(s):</i> PHYS*4040 (if not taken as a pre-requisite)

<b>PHYS*4180 Advanced Electromagnetic Theory F (3-0) [0.50]</b>
Radiation from localized charge-current distributions (atoms, molecules, nuclei, antennae), electromagnetic potentials, gauge transformations, Lagrangian and Hamiltonian formalisms, multipole expansions of electrostatic and magnetostatic fields, and a selection of topics from: radiation damping, Lorentz electron theory, wave guides, plasmas, relativistic electrodynamics, radiation scattering. <i>Prerequisite(s):</i> PHYS*2470, PHYS*3400
<b>PHYS*4240 Statistical Physics II F (3-0) [0.50]</b>
A continuation of PHYS*3240 including a discussion of the grand canonical distribution, quantum statistics, and transport theory. <i>Prerequisite(s):</i> PHYS*3230, PHYS*3240
<b>PHYS*4500 Advanced Physics Laboratory F (0-6) [0.50]</b>
A modular course for students in any physics-related major who will study techniques of nuclear, solid state and molecular physics. <i>Prerequisite(s):</i> PHYS*2450, (1 of PHYS*3100, XSEN*4110)
<b>PHYS*4510 Advanced Physics Project W (0-6) [0.50]</b>
Students will be assigned projects related to their individual interests. These projects may be part of the ongoing research within the Physics Department. Selection of a faculty supervisor and approval of course coordinator must be obtained before course selection. <i>Prerequisite(s):</i> PHYS*3510
<b>PHYS*4540 Molecular Biophysics W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> 0.50 credits in biochemistry, (CHEM*3860 or PHYS*3230)
<b>PHYS*4560 Biophysical Methods F (3-0) [0.50]</b>
An introduction to physical techniques to determine the structure of macromolecules and macromolecular structures of biological interest. The techniques include: differential calorimetry, X-ray and neutron scattering, electron microscopy, Raman and infrared spectroscopy, nuclear magnetic resonance, and electron spin resonance. Applications of these techniques in the study of biological membranes will be emphasized. Students taking this course should already have taken PHYS*4240 or be taking this course concurrently. <i>Prerequisite(s):</i> PHYS*3220, PHYS*4040 <i>Co-requisite(s):</i> PHYS*4240 (if not taken as a prerequisite)
<b>PHYS*4910 Advanced Topics in Physics I U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> (MATH*2150 or MATH*2160), (MATH*2170 or MATH*2270), PHYS*2450, PHYS*2470
<b>PHYS*4920 Advanced Topics in Physics II U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> (MATH*2150 or MATH*2160), (MATH*2170 or MATH*2270), PHYS*2450, PHYS*2470
<b>PHYS*4930 Advanced Topics in Physics III U (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> (MATH*2150 or MATH*2160), (MATH*2170 or MATH*2270), PHYS*2450, PHYS*2470

## Physiology

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*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.*

*Students wishing to study Physiology can complete a 3000 level course or course sequence in: ZOO\*3200; or ZOO\*3210; or HK\*3940; or BIOM\*3100; and either BIOM\*3110 or BIOM\*3120. In addition, students can select specialized courses at the 4000 level (preferably at least 2 with labs) offered by the:*

*Department of Biomedical Sciences:*

BIOM*4020	[0.50]	Physiology of Digestion
BIOM*4030	[0.50]	Endocrine Physiology
BIOM*4041/2	[1.00]	Mammalian Reproductive Biology
BIOM*4050	[0.50]	Biomedical Aspects of Aging

*School of Human Biology:*

HK*4320	[0.75]	Work Physiology
HK*4460	[0.50]	Regulation of Human Metabolism
HK*4530	[0.50]	Human Cardiovascular Physiology

*Department of Zoology:*

ZOO*4170	[0.50]	Experimental Comparative Animal Physiology
ZOO*4390	[0.50]	Environmental Physiology
ZOO*4470	[0.50]	Comparative Endocrinology

## Plant Biology

*Department of Molecular and Cellular Biology*

*Department of Environmental Biology*

*Department of Land Resource Science*

*Department of Plant Agriculture*

### **PBIO\*3110 Crop Physiology F (3-3) [0.50]**

Physiological and biochemical principles related to production by crop canopies. Carbon fixation, leaf area, light interception, assimilate distribution, water relations and nutrient utilization are used to develop solutions to problems of crop yield and quality. Growth and development in response to cultural innovations including the use of growth regulators are also considered. Department of Plant Agriculture.

*Prerequisite(s):* BIOL\*1040

### **PBIO\*3750 Plant Tissue Culture F (2-3) [0.50]**

An examination and discussion of 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. Department of Plant Agriculture.

*Prerequisite(s):* AGR\*2451/2 or BOT\*2100

### **PBIO\*4000 Molecular and Cellular Aspects of Plant-Microbe Interactions F (3-0) [0.50]**

Examination of 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. Departments of Molecular and Cellular Biology and Environmental Biology.

*Prerequisite(s):* BOT\*2100, (MBG\*2020 and MICR\*2020 are recommended)

### **PBIO\*4100 Soil Plant Relationships W (3-0) [0.50]**

Root growth as affected by soil properties; soil plant water relations; soil aeration; absorption, translocation and function of nutrients in plants; ion transport to roots; rhizosphere effects; application of concepts to crop production. Department of Land Resource Science.

*Prerequisite(s):* 1 of AGR\*2301/2, BOT\*2100, SOIL\*2010

### **PBIO\*4150 Molecular and Cellular Aspects of Plant Development W (3-0) [0.50]**

An examination of the molecular and cellular processes that underlie cellular differentiation and organ formation in plants. The roles of homeotic genes, gene regulation, cell polarity, morphogens and environmental effects in development will be discussed. Subjects will be introduced by a lecture and examined in detail in discussions of pertinent research papers. Department of Plant Agriculture. (Offered in even-numbered years.)

*Prerequisite(s):* BOT\*2100

### **PBIO\*4300 Research Opportunities in Plant Biotechnology I S,F,W (0-12) [1.00]**

This course is specifically designed to encourage students to conduct research in an area of Plant Biotechnology. It is normally open to students registered in semesters 7 and 8. Independent theoretical and laboratory research will be conducted under the supervision of individual faculty. Oral and written presentations will be made. Students must make arrangements with both a faculty supervisor and the course coordinator in the semester prior to registration.

*Prerequisite(s):* MBG\*3350

*Restriction(s):* Cannot be enrolled in PBIO\*4310 concurrently, registration in semester 7 or 8 of the B.Sc. Plant Biotechnology Major.

### **PBIO\*4310 Research Opportunities in Plant Biotechnology II S,F,W (0-12) [1.00]**

This course is specifically designed to encourage students to conduct research in an area of Plant Biotechnology. It is normally open to students registered in semesters 7 and 8. Independent theoretical and laboratory research will be conducted under the supervision of individual faculty. Oral and written presentations will be made. Students must make arrangements with both a faculty supervisor and the course coordinator in the semester prior to registration.

*Prerequisite(s):* PBIO\*4300

*Restriction(s):* Registration in semester 7 or 8 of the B.Sc. Plant Biotechnology Major.

### **PBIO\*4530 Environmental Pollution Stresses on Plants W (3-0) [0.50]**

The study of 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 and UV-B radiation) and soil (such as metals and organic xenobiotics). The format includes both lecture and presentation/discussion of current and historical peer-reviewed literature. Department of Land Resource Science.

*Prerequisite(s):* BIOL\*2060, BOT\*2100

### **PBIO\*4750 Genetic Engineering of Plants W (3-3) [0.50]**

An examination and discussion of the principles, protocols and applications of molecular biology and transformation technology to the genetic improvements of plants. Department of Plant Agriculture.

*Prerequisite(s):* MBG\*2020

## 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

#### **POLS\*1400 Issues in Canadian Politics F (3-1) [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. (Also offered through distance education format.)

#### **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. (Also offered through distance education format.)

#### **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.

#### **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.

#### **POLS\*2100 The State in Comparative Perspective 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.

#### **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 in general and on gender, sexuality and politics in particular.

#### **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.

#### **POLS\*2250 Public Administration W (3-0) [0.50]**

This course examines a variety of theoretical approaches to the study of organizations. It then applies these theories to the structure and operation of the government of Canada. It examines the changing role of bureaucracy in government and critically evaluates issues such as financial and administrative responsibility and accountability. (Also offered through distance education format.)

*Prerequisite(s):* POLS\*1150 or POLS\*1400

#### **POLS\*2300 Canadian Government F,W (3-0) [0.50]**

Parliamentary government and federal-provincial relations lie at the heart of the Canadian government system. This course provides a detailed examination of the structure, functions, and performance of these central institutions of Canadian government in a comparative context. (Also available through distance education format.)

#### **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):* POLS\*2080 or POLS\*2100

#### **POLS\*3050 Canadian Political Parties, Elections and Pressure Groups W (3-0) [0.50]**

The course emphasizes political process rather than governmental structures. Topics to be explored include the role of political parties, pressure groups, the electoral system and voting and their impact on the nature of Canada as a democratic state.

*Prerequisite(s):* POLS\*1400 or POLS\*2300

#### **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):* POLS\*2080 or POLS\*2100

#### **POLS\*3070 The Politics of Asian Development F (3-0) [0.50]**

This course explores the political dynamics that have led to the immense variation of wealth, inequality, deprivation and poverty found in Asia. The focus is comparative, and will emphasize three geographically distinct regions: Northeast Asia, Southeast Asia and South Asia.

*Prerequisite(s):* POLS\*2080 or POLS\*2100

#### **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):* POLS\*2080 or POLS\*2100

#### **POLS\*3110 Politics of Ontario U (3-0) [0.50]**

This course provides an overview of the political history of Ontario, the character and development of the political parties and institutions, as well as an intensive examination of selected policy issues in contemporary Ontario politics.

*Prerequisite(s):* 7.50 credits

#### **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\*1400, POLS\*2250, POLS\*2300

#### **POLS\*3160 Women and Politics in the Third World U (3-0) [0.50]**

The purpose of this course is twofold: 1) to examine Western analyses and assumptions concerning women and politics in the Third World; and 2) to examine how women's activities in the Third World challenge our definitions and understanding of power, political participation, and empowerment.

*Prerequisite(s):* POLS\*2080 or POLS\*2100

#### **POLS\*3180 Political Inquiry and Analysis F (3-0) [0.50]**

Social scientists say a great many things about politics, the economy and society, but how can their claims to knowledge be evaluated? In this course the student will be introduced to a critical examination of the kinds of knowledge offered by contemporary political science, and will in the process come to a greater awareness of the methods lying behind his/her own work.

*Prerequisite(s):* 7.50 credits

#### **POLS\*3210 The Constitution and Canadian Federalism 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.

*Prerequisite(s):* POLS\*2300

**POLS\*3220 Classical Political Thought F (3-0) [0.50]**

This course is an exploration of the concepts of justice and reason in the ancient and medieval worlds. The theme will be explored in the writings of philosophers such as Plato, Aristotle, Cicero, St. Augustine, St. Thomas Aquinas and Sir Thomas More. 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\*3280

*Restriction(s):* POLS\*3021

**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\*3280

*Restriction(s):* POLS\*3021

**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

**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

**POLS\*3280 Modern Political Ideologies F (3-0) [0.50]**

An examination of contemporary political ideologies-liberalism and conservatism and imperialism; socialism, communism and fascism - in terms of their evolution and current political significance.

*Prerequisite(s):* 5.00 credits

**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.

*Prerequisite(s):* POLS\*2250 or POLS\*2300

**POLS\*3330 Politics and Trade Liberalization in the Americas U (3-0) [0.50]**

This course examines the politics of trade in the three NAFTA countries - Canada, the US and Mexico. It examines how trade policy is made in each country and how the NAFTA has influenced domestic politics. Topics covered include trade in goods and services, investment and intellectual property.

*Prerequisite(s):* 1 of POLS\*2100, POLS\*2250, POLS\*2300

**POLS\*3370 Environmental Policy Formation and Administration S,F (3-0) [0.50]**

This course surveys both the federal and provincial governmental policies and programs relating to the management of natural resources and the control of pollution by examining the political, legal and administrative mechanisms, monitoring surveillances, and enforcement problems. (Also offered through distance education format.)

*Prerequisite(s):* 7.50 credits

**POLS\*3390 Comparative Democratic Institutions U (3-0) [0.50]**

This course will analyse power in democratic political institutions. It will include an examination of executive and legislative powers and the role of political parties and elections in the exercise of these powers. Presidential and parliamentary systems are examined as well as models of majoritarian and consensual democracy.

*Prerequisite(s):* POLS\*2100 or POLS\*2300

**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

**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.

*Prerequisite(s):* 5.00 credits

**POLS\*3450 European Governments and Politics U (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):* 1 of POLS\*2100, POLS\*2200, EURO\*2070

**POLS\*3460 Communism and Post-Communism U (3-0) [0.50]**

This course focuses on selected issues in the transition from Communism to Post-Communism, viewed in a country, regional or theoretical context. Topics include the rise and demise of the Soviet Union, the new political economic and social structures which are emerging among successor states and in Central and East Europe, as well as their relation with the world at large. LINK

*Prerequisite(s):* 1 of HIST\*2390, POLS\*2100, POLS\*2200

**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

**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):* POLS\*1500 or POLS\*2200

**POLS\*3650 The Systematic Study of Politics W (3-1) [0.50]**

A treatment of empirical methods and techniques in political science, with an emphasis elementary and associational statistics. This course will enable students to confront with a trained, critical eye, the quantitative information and analysis that increasingly characterizes the discipline.

*Prerequisite(s):* 7.50 credits

*Equate(s):* POLS\*2630

*Restriction(s):* Registration in Criminal Justice & Public Policy or Political Science (major, minor or area of concentration) or International Development (major only).

**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 ISS\*2010, POLS\*2080, POLS\*2100, POLS\*2250

**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

**POLS\*3730 The Americas U (3-0) [0.50]**

Despite varying political systems and different historical experiences, the Americas are cohering more and more as a political, economic and social unit. This course will examine evolving political systems and processes in Canada, the United States, Latin America and the Caribbean from a comparative and theoretical perspective. Special emphasis will be placed on hemispheric and regional issues.

*Prerequisite(s):* POLS\*2080 or POLS\*2100

**POLS\*3790 The Political Economy of International Relations 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 ISS\*2010, POLS\*2080, POLS\*2100, POLS\*2200

**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

**POLS\*3920 Modern 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

**POLS\*3930 Politics of the Agri-Food System U (3-0) [0.50]**

Although the production and distribution of food is usually not primarily a function of government, in the 20th century government has been significantly involved in these areas. Questions about the proper role and scope of government involvement have been subject to constant debate, and the extent of this involvement has varied greatly depending on time and place. This course looks at how the state deals with the agricultural sector in different countries. (Also offered through distance education format.)

*Prerequisite(s):* POLS\*1400, (POLS\*2250 or a comparable background in a related discipline)

**POLS\*3940 Accountability and Canadian Government U (3-0) [0.50]**

This course examines the role of accountability within the Canadian government. With an emphasis on fiscal policy at the federal level, the course uses an investigative framework to trace the linkages from policies and decisions to outcomes, and explores the factors that inhibit or facilitate the assignment of responsibility in a complex modern democracy. The roles of various actors (corporations, citizens, lobbyists, bureaucrats, politicians) within Canadian politics are explored, as are such issues as fiscal accountability, government spending, social programming, and economic dependency. (This is a multi-media course requiring on-line access to Netscape 4.0 or equivalent, as well as a video cassette recorder and television.) (Offered through distance education format only.)

*Prerequisite(s):* 5.00 credits

**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.

**POLS\*4030 Contemporary Political Theory U (3-0) [0.50]**

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 Political Theory and Analysis

**POLS\*4100 Women, Justice and Public Policy U (3-0) [0.50]**

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 Public Policy and Administration or Canada and the Americas

**POLS\*4120 Civil Rights and Civil Liberties in Canada and the U.S. F (3-0) [0.50]**

The course examines changing conceptions of civil liberties and rights over time in Canada and the U.S., mechanisms for their protection and promotion, and what happens when civil liberties and rights clash with one another. In particular, the course will focus on civil rights and civil liberties decisions by the Supreme Courts in both countries. This focus will include seeking explanations for why and how the decisions were made by the Courts and what impact the decisions have had on public policy and society.

*Prerequisite(s):* POLS\*3130 or POLS\*3210 and at least 1.00 credits at the 3000 level in Public Policy and Administration

**POLS\*4140 Canada in the Twenty-First Century W (3-0) [0.50]**

An in-depth examination of selected issues concerning Canadian political institutions and process.

*Prerequisite(s):* POLS\*2300 and 1.00 credits at the 3000 level in Canada and the Americas

**POLS\*4160 Multi-Level Governance in Canada U (3-0) [0.50]**

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 Canada and the Americas stream.

**POLS\*4200 Studies in International Relations/Political Economy U (3-0) [0.50]**

Studies of state and non-state behavior in the international system, including such matters as international institutions and regimes, the international and domestic politics of a particular country or region or the impact of globalization. Variations in course content will reflect the interests of the particular instructor.

*Prerequisite(s):* 1 of POLS\*2080, POLS\*2100, POLS\*2200; and at least 1.00 credits at the 3000 level in Comparative/International Development

**POLS\*4250 Problems in Public Administration and Public Policy W (3-0) [0.50]**

An analysis of financial and personnel management problems in government, with particular reference to federal governmental practices or to particular public policy issues.

*Prerequisite(s):* POLS\*2250 and 1.00 credits at the 3000 level in Public Policy and Administration or Canada and the Americas

**POLS\*4260 Topics in Public Policy U (3-0) [0.50]**

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 Public Policy and Administration or Canada and the Americas)

**POLS\*4300 Human Rights, Ethics, and Development W (3-0) [0.50]**

This course is intended to address the ethical issues that arise from development processes and studies by focusing on human rights. The subject is explored from a range of philosophical, religious, and cultural perspectives, including both Western and non-Western. Related themes include global and social justice; nationalism, cosmopolitanism, and multiculturalism.

*Prerequisite(s):* POLS\*2000 and 1.00 credits in Political Theory or Comparative/International Development

*Restriction(s):* POLS\*3120

**POLS\*4710 Topics in Comparative Politics U (3-0) [0.50]**

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), 1.00 credits at the 3000 level in the Comparative/International Development stream.

**POLS\*4720 Topics in International Relations U (3-0) [0.50]**

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 Comparative/International Development stream.

**POLS\*4930 Selected Topics in Political Science II 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.

**POLS\*4970 Honours Political Science Research I S,F,W (3-0) [0.50]**

This is Part I of the Honours Essay. Students complete the necessary reading and research for their Honours Essay under the supervision of a department advisor. A research proposal is expected by the end of the semester. Political science majors who wish to pursue an honours thesis must register in this course in their 7th semester. Student selection of an approved subject area and instructor must be completed in the semester previous to enrolment in this course.

*Prerequisite(s):* 70% average in all POLS courses. Recommendation: Students with less than a 75% average are advised not to take this course.

*Restriction(s):* Instructor consent required.

**POLS\*4980 Honours Political Science Research II S,F,W (3-0) [0.50]**

This is Part II of the Honours Essay. Students organize and write their essays under the supervision of their advisor. Major honours political science students must register in this course in their 8th semester.

*Prerequisite(s):* POLS\*4970

*Restriction(s):* Instructor consent required.

## Population Medicine

### Department of Population Medicine

#### **POPM\*3240 Epidemiology F (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.

*Prerequisite(s):* BIOL\*1040, STAT\*2040

#### **POPM\*4040 Epidemiology of Food-borne Diseases F (3-0) [0.50]**

This course examines the epidemiology and prevention of foodborne 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, instructor consent required.

*Restriction(s):* FOOD\*4210

#### **POPM\*4230 Animal Health F (3-0) [0.50]**

A consideration of the common and exotic diseases of domestic animals (especially dairy cattle), their cause and recognition, and the preventive measures which may be applied to reduce losses. Methods of monitoring health and productivity in herds (particularly dairy) will be emphasized. Management practices which are associated with improved health and productivity will be discussed. Problem-based teaching methodologies will be employed to focus discussion on the quantification of the impact of management practices on health and biological efficiency. (Offered in even-numbered years.)

*Prerequisite(s):* ANSC\*2340

## Psychology

### Department of Psychology

Students wishing to take a 2000, 3000 or 4000 level course without having completed the appropriate prerequisites must receive permission of the instructor who will determine whether the student has the required background for the course. Students in all psychology courses will be encouraged to participate in the on-going research of the department.

**Honours Courses:** courses marked (H) are designed for students in a psychology honours program, the Information Systems and Human Behaviour program, the Developmental Psychology Minor program, the Educational Psychology Minor program, the Organizational Behaviour Minor program, the Social Psychology program, the Cognitive Neuropsychology Minor program, or Human Resources Management major of the Bachelor of Commerce program. Students in other programs wishing to take these courses must obtain the permission of the instructors concerned. Unless otherwise specified, all other courses may be taken by general, honours, and students from other programs, providing the prerequisites are met. **Courses designated with (H) are Honours level courses requiring for registration a cumulative average of at least 70% in all course attempts in Psychology, or registration in either the HRM Major or ISHB Major.**

**Psychology Core:** courses marked (C) are Psychology core courses. Students registered in psychology programs are advised to complete at least 2.00 credits of the psychology core at the 2000 level prior to attempting any 3000 level psychology credit other than PSYC\*3320, PSYC\*3370, and PSYC\*3380.

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\*1100 Principles of Behaviour S,F,W (3-0) [0.50]

This is an introduction to the study of biopsychology, sensory processes, perception, learning, memory, thought, language, consciousness and motivation. (Also offered through distance education format.)

#### PSYC\*1200 Dynamics of Behaviour S,F,W (3-0) [0.50]

This is an introduction to the study of human development, intelligence, personality, psychopathology and its treatment and social psychology. (Also offered through distance education format.)

#### PSYC\*2010 Quantification in Psychology S,F,W (3-0) [0.50]

An introduction to psychological measurement and to statistical principles in psychological research. The course emphasizes descriptive statistics and introduces concepts and techniques of hypothesis testing. Cannot be taken for credit by students with credit in a 2000 level or above course in statistics. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*1100 or PSYC\*1200

#### PSYC\*2310 Introduction to Social Psychology S,F,W (3-0) [0.50]

The content and research methods of social psychology will be explored in lectures and seminars. Content includes social perception, attraction, group dynamics, leadership, conflict and cooperation, attitude change, aggression and conformity. (Also offered through distance education format.) (C)

*Prerequisite(s):* PSYC\*1200

#### PSYC\*2330 Principles of Learning F,W (2-2) [0.50]

An introduction to the basic principles and concepts of classical and instrumental conditioning paradigms of learning, via lectures, demonstrations and student projects. Some student projects may involve laboratory practice on animal conditioning. (C)

*Prerequisite(s):* PSYC\*1100, PSYC\*1200

#### PSYC\*2360 Introductory Research Methods S,F,W (2-2) [0.50]

The application of scientific method in psychological experiments with laboratory demonstration.

*Prerequisite(s):* PSYC\*1100, PSYC\*1200, (PSYC\*2010 or STAT\*2040)

#### PSYC\*2390 Principles of Sensation and Perception F,W (2-2) [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 laboratory demonstrations and experiments. (Also offered through distance education format.) (C)

*Prerequisite(s):* PSYC\*1100

#### PSYC\*2410 Behavioural Neuroscience I F,W (2-2) [0.50]

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 arousal and emotion. Laboratory demonstrations and exercises may be included. (C)

*Prerequisite(s):* PSYC\*1100

#### PSYC\*2450 Introduction to Developmental Psychology F,W (3-0) [0.50]

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. (Also offered through distance education format.) (C)

*Prerequisite(s):* PSYC\*1100, PSYC\*1200

#### PSYC\*2650 Cognitive Psychology F,W (2-2) [0.50]

An introduction to cognitive processes, including topics in the areas of attention, memory, language and reasoning. Students will be exposed to and participate in laboratory demonstrations and experiments. (Also offered through distance education format.) (C)

*Prerequisite(s):* PSYC\*1100

#### PSYC\*2740 Personality S,F,W (3-0) [0.50]

A review of the theory, assessment procedures and research findings pertinent to major personality constructs. Personality research, methodology and design will also be covered. (Also offered through distance education format.) (C)

*Prerequisite(s):* PSYC\*1100, PSYC\*1200

#### PSYC\*3010 Compensation Systems W (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. (Offered through distance education format only.) (H)

*Prerequisite(s):* PSYC\*2310

*Restriction(s):* Students must have 70% average in Psychology courses to register or be enrolled in the B.Comm-HRM Major.

#### PSYC\*3020 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. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*2310 (also see psychology core statement)

#### PSYC\*3030 Neurochemical Basis of Behaviour U (3-0) [0.50]

An analysis of how drugs act on various neurochemical systems to regulate motivation and behaviour. Topics of discussion may include psychopathology and its treatment.

*Prerequisite(s):* PSYC\*1100, (BIOM\*3090 or PSYC\*2410) (also see psychology core statement)

#### PSYC\*3040 Current Issues in Neuropsychology U (3-0) [0.50]

Major areas of applied brain research and clinical aspects of brain function will be covered. Emphasis will be given to the analysis of psychological deficits following brain damage and to selected aspects of intellectual disabilities.

*Prerequisite(s):* PSYC\*1100, PSYC\*2410 (also see psychology core statement)

#### PSYC\*3060 Occupational Health Psychology F,W,S (3-0) [0.50]

The relationship between work, employment and both psychological and physical well-being. The promotion of workplace health through public policy and workplace intervention. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*2310 (also see psychology core statement).

#### PSYC\*3070 Psychology in Human Resource Management U (3-0) [0.50]

This course explores the application of psychological theory and measurement in human resources management. A dual perspective is taken: that of the worker impacted by these practices and that of the manager responsible for implementing them. Specific topics include recruitment, personnel selection, performance management, training, and executive assessment, development, and succession. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*1200, PSYC\*2310 (also see psychology core statement).

*Restriction(s):* HTM\*3000

**PSYC\*3080 Organizational Psychology U (3-0) [0.50]**

An examination of current theories and practices in organizational psychology. Selected topics may include motivation, turnover, absenteeism, leadership, job design, work attitudes, organizational justice, and organizational development and change. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*2310 (also see psychology core statement).

*Restriction(s):* HTM\*2200

**PSYC\*3090 Training and Development F (3-0) [0.50]**

This course focuses on how organizations develop employee skills through training and development programs. Topics will include: adult learning principles, training needs assessments, training program design, instructional methodologies, coaching and mentoring, individualized development and program evaluation. (Offered through distance education only.) (H)

*Prerequisite(s):* PSYC\*2310

*Restriction(s):* Students must have 70% average in Psychology courses to register or be enrolled in the BCOMM-HRM Major.

**PSYC\*3100 Evolutionary Psychology U (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.

*Prerequisite(s):* PSYC\*2360 (also see psychology core statement)

**PSYC\*3110 Topics in Health Psychology U (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.

*Prerequisite(s):* PSYC\*2310, PSYC\*2450 (also see psychology core statement)

**PSYC\*3220 Ergonomics: the Scientific Study of People-System Relationships S (3-0) [0.50]**

This course provides a broad survey of the field of ergonomics from the perspective of psychology. Topics to be covered include: human-system concepts and models, safety, accidents, and human error, human perceptual capabilities, human-machine interfaces, engineering anthropometry, workplace design and evaluation methods, measuring the environment. The course will draw widely on web-based materials and require students to complete a number of interactive demonstrations and lab exercises. Students will be expected to draw upon their own workplace experiences and to actively apply the course material to practical workplace situations. (Offered through distance education only.)

*Prerequisite(s):* PSYC\*2650, PSYC\*2390

**PSYC\*3250 Psychological Measurement U (3-0) [0.50]**

An introduction to the theory of psychological measurement and measurement procedures presently used in psychology. Coverage will include such topics as reliability, validity, test construction; and the measurement of ability, personality, attitudes, interest and achievement. (Also offered through distance education format.) (H)

*Prerequisite(s):* PSYC\*2010 (also see psychology core statement)

**PSYC\*3280 Minds, Brains & Machines F (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):* 1.50 credits in Psychology or 1.50 credits in Philosophy

**PSYC\*3300 The Psychology of Gender U (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, intrapsychic, interpersonal, and socio-cultural domains.

*Prerequisite(s):* PSYC\*1200 and at least 1.00 credits of the psychology core (also see psychology core statement)

**PSYC\*3310 Applied Social Psychology U (3-0) [0.50]**

A number of applied issues will be examined from a social psychological perspective. These may include aggression, prejudice, helping, mental illness, crime and addiction. The format will consist of reading, discussion and research/field projects.

*Prerequisite(s):* PSYC\*2310 (also see psychology core statement)

**PSYC\*3320 Statistical Principles in Psychological Research F,W (2-2) [0.50]**

The course emphasizes inferential tests applied to psychological research. Topics will include: t-tests, analysis of variance, multiple correlation and regression and selected topics in non-parametric statistics. Laboratory sessions will cover statistical application exercises in psychological research. (H)

*Prerequisite(s):* PSYC\*2010 or STAT\*2040

**PSYC\*3330 Memory U (3-1) [0.50]**

An examination of theoretical and empirical studies of the psychological nature of the acquisition, storage and retrieval of information. Students will be exposed to and participate in laboratory demonstrations and experiments.

*Prerequisite(s):* PSYC\*2650 (also see psychology core statement)

**PSYC\*3340 Psycholinguistics U (3-1) [0.50]**

An introduction to the conceptions of the structure of language as they relate to processes underlying the acquisition, production, perception and understanding of speech, and to empirical studies that bear on these conceptions. Students will be exposed to and participate in laboratory demonstrations and experiments. (Also offered through distance education format.)

*Prerequisite(s):* LING\*1000 or PSYC\*2650 (also see psychology core statement)

**PSYC\*3370 Experimental Design and Analysis F (2-2) [0.50]**

This course is intended for students planning to complete PSYC\*4870 and PSYC\*4880 in preparation for graduate studies in Psychology. This course emphasizes (1) the model comparison approach to analysis of variance and (2) effective scientific communication. Issues related to design choice, power, multiple-comparisons and categorical data analysis will be reviewed. Laboratory exercises will include SPSS applications and research projects. (H)

*Prerequisite(s):* PSYC\*2360, (PSYC\*3320 or STAT\*2050)

*Restriction(s):* PSYC\*3371/2 . A minimum grade point average of 75% in Psychology courses or instructor consent.

**PSYC\*3380 Non-experimental Research Methods W (2-2) [0.50]**

This course is intended for students planning to complete PSYC\*4870 and PSYC\*4880 in preparation for graduate studies in Psychology. This course addresses issues related to the internal and external validity of quasi-experimental, correlation and other non-experimental research methods. In addition, issues concerning survey sampling and the development and refinement of survey questions are discussed. Laboratory components will include SPSS applications, research projects and style of effective scientific communication. (H)

*Prerequisite(s):* PSYC\*2360, (PSYC\*3320 or STAT\*2050)

*Restriction(s):* PSYC\*3371/2 . A minimum grade point average of 75% in Psychology courses or instructor consent.

**PSYC\*3390 Abnormal Psychology U (3-0) [0.50]**

Current theory and research in the field of abnormal psychology will be examined in terms of various models (biological, behavioral, social and psychodynamic). Selected topics may include: stress and anxiety, affective disorders, schizophrenia, psychophysiological and personality disorders, and mental health. (Also offered through distance education format.)

*Prerequisite(s):* PSYC\*2740 (also see psychology core statement)

**PSYC\*3410 Behavioural Neuroscience II U (2-2) [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. Laboratory demonstrations, exercises and projects may be included.

*Prerequisite(s):* PSYC\*2410 (also see psychology core statement)

**PSYC\*3430 Topics in Animal Learning and Cognition U (3-0) [0.50]**

The study of current research in animal cognition, emphasizing such topics as numerical, spatial and logical competence, conceptual abilities, and memory. Seminar presentation and discussion will assume a basic knowledge of operant and Pavlovian conditioning as taught in PSYC\*2330.

*Prerequisite(s):* PSYC\*2330 (also see psychology core statement)

**PSYC\*3440 Cognitive Development U (3-0) [0.50]**

An examination of theory and research pertaining to children's intellectual development. Topics include children's learning and the development of perception, memory, thinking and language.

*Prerequisite(s):* FRHD\*2270 or PSYC\*2450 (also see psychology core statement)

<b>PSYC*3450 Social and Personality Development U (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> FRHD*2270 or PSYC*2450 (also see psychology core statement)
<b>PSYC*3460 Abnormal Development U (3-0) [0.50]</b>
Theory, research and aspects of current practice concerning abnormal psychological development in childhood and adolescence.
<i>Prerequisite(s):</i> PSYC*3440 or PSYC*3450 (also see psychology core statement)
<b>PSYC*3480 Psychology of Sport U (3-0) [0.50]</b>
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.
<i>Prerequisite(s):</i> PSYC*1100, PSYC*1200, (PSYC*2310 or PSYC*2740) (also see psychology core statement)
<b>PSYC*3500 Social Interactions U (3-0) [0.50]</b>
The course concentrates on social interactions in dyads and small groups. Selected topics will be examined through reading, discussion and student projects. Topics may include: the structure and sequence of conversation, self-disclosure, miscommunication, and nonverbal communication. (H)
<i>Prerequisite(s):</i> PSYC*2310 (also see psychology core statement)
<b>PSYC*3520 Political Psychology U (3-0) [0.50]</b>
A social psychological examination of collective behaviours, social movements and social (policy) change, emphasizing the development and impact of mass media and relationships with individual, collective and political violence.
<i>Prerequisite(s):</i> PSYC*2310 (also see psychology core statement)
<b>PSYC*3570 The Psychology of Death and Dying U (3-0) [0.50]</b>
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. (Offered through distance education format only.)
<i>Prerequisite(s):</i> 1 of PSYC*2310, PSYC*2740, PSYC*2450, work experience in related fields, instructor consent (also see psychology core statement)
<b>PSYC*3660 Contemporary Psychology U (3-0) [0.50]</b>
Some current developments in psychology. Topics will vary with the interests of faculty members assigned to the course and will be announced prior to the course selection period.
<i>Prerequisite(s):</i> previous study related to the topic area (also see psychology core statement)
<b>PSYC*3680 Selected Topics in Psychology U (3-0) [0.50]</b>
This course will highlight current and topical issues in psychology. Topics will vary with the interests of faculty members assigned to the course and will be announced prior to the course selection period.
<i>Prerequisite(s):</i> previous study related to the topic area (also see psychology core statement)
<i>Restriction(s):</i> Instructor consent required.
<b>PSYC*3690 Community Mental Health U (3-0) [0.50]</b>
An introduction to the principles and practices of community mental health and community psychology. The course deals with the application of public health concepts to the field of mental health, the epidemiology of mental disorder in the community, the design and evaluation of preventive programs for populations at risk of illness, and the creation of alternatives to institutional treatment of the mentally ill. Several field visits to community mental health programs will be arranged. This course should be of special interest to students who are planning to pursue careers in such human service fields as social work and occupational therapy.
<i>Prerequisite(s):</i> PSYC*2310 (also see psychology core statement)
<b>PSYC*3710 Psychology of Learning Difficulties and Disabilities I F (3-0) [0.50]</b>
An examination of current theories regarding learning difficulties and disabilities in educational settings. Emphasis will be placed on cognitive, social and motivational factors associated with learning problems and on behavioral and educational remedial approaches.
<i>Prerequisite(s):</i> 1 of FRHD*2270, PSYC*2450, PSYC*2650 (also see psychology core statement)

<b>PSYC*3720 Psychology of Learning Difficulties and Disabilities II W (3-0) [0.50]</b>
Continuation of PSYC*3710. Students will develop and report on a systematic remedial project involving an underachieving school-age child.
<i>Prerequisite(s):</i> PSYC*3710 (also see psychology core statement)
<b>PSYC*3800 Psychology and Education U (3-0) [0.50]</b>
The application of psychological principles and techniques to the study of the educational process. (Also offered through distance education format.)
<i>Prerequisite(s):</i> PSYC*1100, (PSYC*1200 or FRHD*2270) (also see psychology core statement)
<b>PSYC*3850 Intellectual Disabilities U (3-0) [0.50]</b>
This course covers applied and theoretical aspects of intellectual disabilities, and lays a foundation for work in the area of intellectual disabilities. (Also offered through distance education format.)
<i>Prerequisite(s):</i> FRHD*2270 or PSYC*2450 (also see psychology core statement)
<b>PSYC*3900 Psychology Research Internship F,W,S (0-6) [0.50]</b>
This course provides an experiential learning opportunity through the active participation of the student in a faculty member's ongoing research program. It is expected that students will develop a broader appreciation of the relationship between knowledge, theory and research while acquiring basic skills in research methodologies and modes of inquiry. The course will require involvement in both the practice and reporting of research. The student must consult the supervisory faculty member before selecting or registering for the course.
<i>Prerequisite(s):</i> PSYC*1100, PSYC*1200, PSYC*2010 and at least 1.00 credits at the 2000 level of the psychology core
<i>Restriction(s):</i> Instructor consent required.
<b>PSYC*3910 Psychology Externship F,W,S (0-6) [0.50]</b>
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.)
<i>Prerequisite(s):</i> (PSYC*1100, PSYC*1200, PSYC*2010 and at least 1.00 credits at the 2000 level of the psychology core) or enrolment in the B.Comm Program, Human Resources Management Major
<i>Restriction(s):</i> Instructor consent required.
<b>PSYC*4100 Applied Research in Human Resources Management F (3-0) [0.50]</b>
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. (H)
<i>Prerequisite(s):</i> PHIL*2600, PSYC*2360, (HTM*3000 or PSYC*3070), (HTM*2200 or PSYC*3080)
<b>PSYC*4310 Advanced Topics in Social Psychology U (3-0) [0.50]</b>
An in-depth examination of specific advances in social psychological research, theory, and/or applications. Specific topics, to be announced prior to course selection, will vary according to the interests of the instructor of the course. (H)
<i>Prerequisite(s):</i> PSYC*3310 or PSYC*3500 (also see psychology core statement)
<b>PSYC*4320 Advanced Applied Social Psychology F (3-0) [0.50]</b>
A seminar course dealing with topics of an applied social nature. This course may focus on a single or a variety of topics such as: health, forensics, conflict (inter-group and interpersonal), social justice and cultural issues. This course addresses both research and practice issues and covers a variety of theories and methodologies. (H)
<i>Prerequisite(s):</i> PSYC*3310 or PSYC*3500

<b>PSYC*4330 Advanced Topics in I/O Psychology (H) U (3-0) [0.50]</b>
Students will examine theoretical and methodological issues in selected topic areas of industrial/organizational psychology. The focal area of the course, or range of industrial/organizational topics covered by the course, will vary depending on instructor. Selected topic areas may include leadership issues, 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. (H)
<i>Prerequisite(s):</i> (HTM*3000 or PSYC*3070), (HTM*2200 or PSYC*3080)
<b>PSYC*4370 History of Psychology U (3-0) [0.50]</b>
The historical roots of modern psychology. Students electing to major by completing the Honours Thesis Courses I and II should note that they are expected to also take either PSYC*4900, or this course, prior to, or concurrent with, either PSYC*4870 or PSYC*4880 (see Graduate Advisory Note under Major). (H)
<i>Prerequisite(s):</i> 4.00 credits in psychology, with at least 1.00 credits at the 3000 level or above
<b>PSYC*4440 Contemporary Issues in Child Development U (2-2) [0.50]</b>
This course is primarily designed for students in the Psychology program whose special interests are developmental. Students will examine theoretical and methodological issues in a specific area of developmental psychology. The course will involve detailed evaluation of selected studies and when appropriate, student research projects. (H)
<i>Prerequisite(s):</i> PSYC*2360, (PSYC*3440 or PSYC*3450)
<b>PSYC*4500 Current Theoretical Issues in Psychology S,F,W (3-0) [0.50]</b>
An independent program of study in topics of current theoretical import in psychology, to be decided by the student in consultation with the supervisory faculty member before the student may select or register for the course. (H)
<i>Prerequisite(s):</i> 4.00 credits in psychology, with at least 1.00 credits at the 3000 level or above
<i>Restriction(s):</i> Instructor consent required.
<b>PSYC*4510 Current Issues in Psychology S,F,W (0-6) [0.50]</b>
The study of issues of current interests in psychology. Topics will vary with the interests of faculty members assigned to the course and will be announced prior to the course selection period. The course is available either as a senior lecture/seminar course with regularly scheduled class times, or as an independent study course with the topic and schedule decided in advance by the student in conjunction with a supervisory faculty member. (H)
<i>Prerequisite(s):</i> 4.00 credits in psychology, with at least 1.00 credits at the 3000 level or above and previous study related to the topic area (also see psychology core statement)
<i>Restriction(s):</i> Instructor consent required.
<b>PSYC*4600 Cognitive Neuroscience U (3-0) [0.50]</b>
This course will focus on methods used in contemporary cognitive neuroscience (including but not limited to: PET, functional MRI, EEG, intracranial stimulation and recording) as they aid in the elucidation of neural basis of behaviour. (H)
<i>Prerequisite(s):</i> PSYC*2360, (1 of PSYC*2390, PSYC*2410, PSYC*2650), (also see psychology core statement)
<i>Restriction(s):</i> PSYC*4400
<b>PSYC*4750 Motivation U (3-0) [0.50]</b>
This course examines the topics of motivation and emotion from various subdisciplinary perspectives, adopting a senior seminar format and problem-centred approach. (H)
<i>Prerequisite(s):</i> 15.0 credits
<b>PSYC*4760 Seminar in Personality and Individual Differences U (3-0) [0.50]</b>
A course in personality and individual differences intended primarily for honours students in psychology. Emphasis will be placed on a critical analysis of current controversies in the area as well as an in-depth examination of specific advances in the field. Specific topics, to be announced prior to course selection, will vary according to the interests of the instructor of the course. (H)
<i>Prerequisite(s):</i> PSYC*2740, PSYC*3250

<b>PSYC*4870 Honours Thesis I F (3-0) [0.50]</b>
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 academic records are used for student selection. Course registration requires the signature of the Chair of the department's Undergraduate Affairs and Curriculum Committee (UACC). This UACC signature is contingent upon the student demonstrating they have obtained a Thesis Supervisor's signature on the department's Thesis Registration Form and have an academic standing appropriate for application to graduate programs (see Graduate Advisory under Major). As well, registration for Honours Thesis I will require that either PSYC*4370 or PSYC*4900 is taken prior to, or concurrent with, either PSYC*4870 or PSYC*4880. (H)
<i>Prerequisite(s):</i> [(PSYC*3370, PSYC*3380), or PSYC*3371/2 ], [70% average across (PSYC*2010 or STAT*2040), (PSYC*3320 or STAT*2050)]
<i>Restriction(s):</i> Instructor consent required.
<b>PSYC*4880 Honours Thesis II W (2-10) [1.00]</b>
A continuation of PSYC*4870. Students conduct research and write an undergraduate thesis under the direction of a faculty member. This course is intended for students in the honours program. Note that registration in this course will require that either PSYC*4370 or PSYC*4900 is taken prior to, or concurrent with, either PSYC*4870 or PSYC*4880. (H)
<i>Prerequisite(s):</i> PSYC*4870, [70% average across (PSYC*2010 or STAT*2040), (PSYC*3320 or STAT*2050), [(PSYC*3370, PSYC*3380) or PSYC*3371/2 ]
<i>Restriction(s):</i> PSYC*4881/2
<b>PSYC*4900 Psychology Seminar U (3-0) [0.50]</b>
Student seminars and discussions will be organized around theoretical and substantive issues in the discipline of psychology. A major objective is to assist advanced undergraduate students to achieve a degree of synthesis of materials studied in their previous psychology courses (also see psychology core statement). Students electing to Major by completing the Honours Thesis I and II should note that they are expected to also take either PSYC*4370, or this course, prior to, or concurrent with, either PSYC*4870 or PSYC*4880 (see Graduate Advisory under Major). (H)
<i>Prerequisite(s):</i> 14.00 credits (including 4.00 credits in psychology, with at least 1.00 credits at the 3000 level or above)
<i>Restriction(s):</i> Registration in a Psychology Major of an Honours program.
<b>PSYC*4910 Co-operative Education Project I S,F,W (0-6) [0.50]</b>
An independent program of study formally integrating the student's academic study with 1 or more work experiences provided by the co-operative education program, to be decided by the student in consultation with the supervisory faculty. The course is normally to be taken concurrently with a co-operative education work term, with the project preferably aimed at making a significant contribution to the work setting. (H)
<i>Prerequisite(s):</i> 2 co-operative education work terms
<i>Restriction(s):</i> Instructor consent required.

## Rural Extension

*School of Environmental Design and Rural Development*

### **REXT\*2000 Introduction to Rural Extension F (3-0) [0.50]**

Introduction to Rural Extension including history and philosophy; learning and motivation; the rural setting; adoption/ technology transfer processes; marketing; planning; extension teaching/communication methods and technology; evaluation; extension agencies and programs.

### **REXT\*3000 Program Development and Evaluation W (3-0) [0.50]**

Concepts and processes of program development and evaluation of rural extension programs. Programs designed with client involvement, situational analysis and priority setting will receive particular attention. (Offered in odd-numbered years.)

*Prerequisite(s):* 10.00 credits

### **REXT\*3040 Communication Process S,W (3-0) [0.50]**

Introduction to the study of the communication process, with emphasis on the examination of symbols, meaning, patterns of miscommunication and their correctives. (Offered through distance education format only.)

*Prerequisite(s):* 10.00 credits

### **REXT\*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

*Equate(s):* REXT\*4050

### **REXT\*3060 International Communication W (3-0) [0.50]**

An inquiry into the role of communication in global development. Emphasis is on the application of interpersonal, inter-cultural communication and the mass media in the development process.

*Prerequisite(s):* 10.00 credits

### **REXT\*3080 Technology in Extension S (3-0) [0.50]**

An examination of the issues involved in using media in formal and non-formal teaching situations. The comparative characteristics of media will be examined. The "system approach" to the adoption of teaching strategies will be emphasized. The relationships between people and machines in education will be considered. (Offered through distance education format only.)

*Prerequisite(s):* 10.00 credits including 1 of CIS\*1000, CIS\*1200, equivalent

### **REXT\*3100 Teaching and Learning in Non-Formal Education W (3-0) [0.50]**

Learning principles, theories and practices in extension education. Emphasis is on non-formal teaching-learning situations. (Offered in even-numbered years.)

*Prerequisite(s):* 10.00 credits

### **REXT\*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

### **REXT\*4060 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):* REXT\*3050 or equivalent

*Restriction(s):* Instructor consent required.

### **REXT\*4100 Leadership Development in Rural Organization U (3-0) [0.50]**

The management of rural extension programs with emphasis on the functions and dimensions of leadership and the development of leadership in rural organizations.

*Prerequisite(s):* 10.00 credits

### **REXT\*4180 Social Issues in Organic Agriculture W (2-2) [0.50]**

This interdisciplinary course will build on SOIL\*3030 and CROP\*3130, Tutorials in Organic Agriculture I and II, to 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, the commons, the debate between economics and the environment, the organic agri-food system, rural communities, the role of the family farm, land use and certification/regulation.

*Prerequisite(s):* 1 of AGR\*3400, (CROP\*3130, SOIL\*3030), SOC\*2080

## 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.

Sociology credit may also be given for some Anthropology courses with the exception of ANTH\*3840 through ANTH\*4910 inclusive. See a Sociology/Anthropology Faculty Advisor for approval of substitutions.

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.

#### SOC\*1100 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. (Also offered through distance education format.)

#### SOC\*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.

#### 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

#### 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. (In spring semester offered through distance education format only.)

*Prerequisite(s):* SOC\*1100 or SOC\*1500

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website.

#### 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, GEOG\*1220, SOC\*1100

#### SOC\*2090 Urban Sociology U (3-0) [0.50]

This course examines historical and contemporary dimensions of urban life. Specific topics may include: the geography and ecology of cities, urban cultures and lifestyles, stratification, housing, crime, demographic changes, economic and environmental issues, and global urbanization.

*Prerequisite(s):* SOC\*1100

#### SOC\*2190 Technology and Society W (3-0) [0.50]

This course offers a broad introduction to the social dimensions of science and technology and of emerging information technologies.

*Prerequisite(s):* SOC\*1100

#### SOC\*2280 Society and Environment U (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 toxins, species extinction and population growth pressures.

*Prerequisite(s):* 1 of ANTH\*1150, GEOG\*1220, SOC\*1100

#### 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

#### SOC\*2660 Contemporary Native Peoples of Canada W (3-0) [0.50]

An analysis of the impact of Euro-Canadian society on native culture. Particular emphasis will be given to contemporary issues relating to Canadian native peoples (Indians, Inuit and Metis) such as education, treaties and reserves, land claims, government administration and economic development. (Offered in odd-numbered years.)

*Prerequisite(s):* ANTH\*1150 or SOC\*1100

*Restriction(s):* ANTH\*2660

#### SOC\*2700 Criminological Theory 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

#### SOC\*2750 Serial Murder S,W (3-0) [0.50]

This course examines the theoretical and empirical literature on serial murder. It reviews the popular image of serial murder and compares this image with that derived from scholarly investigation. Specific topics include the definition of serial murder, the methods used to detect serial murder, including profiling, and the creation of serial murder typologies. The course does not discuss individual serialists. The course examines how to understand and study serial murder in modern societies. (Offered through distance education format only.)

*Prerequisite(s):* 1 of ANTH\*1150, FRHD\*1010, PHIL\*1010, POLS\*1400, PSYC\*1100, PSYC\*1200, SOC\*1100, SOC\*1500

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website.

#### 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. (Offered in odd-numbered years.)

*Prerequisite(s):* SOAN\*2111/2, SOAN\*2120

#### SOC\*3110 Comparative Religious Systems W (3-0) [0.50]

An analysis of stability and change in patterns of religious beliefs, behaviour and institutions. (Offered in odd-numbered years.)

*Prerequisite(s):* SOAN\*2111/2, SOAN\*2120

#### 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\*2111/2, SOAN\*2120

#### 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\*2111/2, SOAN\*2120

#### SOC\*3340 Education, Change and Resistance U (3-0) [0.50]

An examination of educational institutions and their relationships to other sectors of society, in particular political and economic. Topics include the nature and objectives of education, equality of opportunity, measures of educational achievement and attainment, manifest and hidden curricula, and public policy.

*Prerequisite(s):* SOAN\*2111/2, SOAN\*2120

#### SOC\*3380 Society and Nature U (3-0) [0.50]

Classical to contemporary theories of the relations between society and the environment will be examined. These include Cartesian, Puritan, Utilitarian, laissez-faire liberal, Marxist, "deep ecologist" and eco-feminist approaches. Concepts to be explored are ecology, wilderness, growth, sustainability, species, domination, animal rights and stewardship.

*Prerequisite(s):* 1 of ANTH\*1150, PHIL\*2070, SOC\*1100, SOC\*2280

#### SOC\*3410 Individual and Society U (3-0) [0.50]

Examining social-psychology from the sociological perspective, this course deals with the relation between social and cultural structure, on the one hand, and self or personality on the other. Employing symbolic interactionism and affect control theory, the course shows how social interaction mediated by language is the well-spring of both social cognitions and emotions.

*Prerequisite(s):* SOAN\*2111/2, SOAN\*2120

**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\*2111/2 or SOC\*2700), SOAN\*2120

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. Please see the departmental website.

**SOC\*3710 Young Offenders 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\*2111/2 or SOC\*2700), SOAN\*2120

*Restriction(s):* Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).

**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, juries, the roles of judges, and alternatives to criminal courts.

*Prerequisite(s):* (SOAN\*2111/2 or SOC\*2700), SOAN\*2120

*Restriction(s):* Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).

**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\*2111/2 or SOC\*2700), SOAN\*2120

*Restriction(s):* Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).

**SOC\*3750 Police in Society F (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\*2111/2 or SOC\*2700), SOAN\*2120

*Restriction(s):* Registration in Anthropology, Criminal Justice & Public Policy or Sociology (major, minor or area of concentration).

**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\*2111/2, SOC\*2080, SOC\*2700), SOAN\*2120

**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\*2111/2, SOC\*2080, SOC\*2700), SOAN\*2120

**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.

**SOC\*4010 Violence and Society 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):* 15.00 credits including (SOC\*2700 or SOC\*3310), (SOAN\*3120 or POLS\*3650)

*Restriction(s):* Registration in Anthropology, Criminal Justice & Public Policy or Sociology majors.

**SOC\*4030 Advanced Topics in Criminology F (3-0) [0.50]**

An in-depth study of selected issues in criminology.

*Prerequisite(s):* (2 of SOC\*3490, SOC\*3710, SOC\*3730, SOC\*3740, SOC\*3750), (1 of ANTH\*3690, SOC\*2700, SOC\*3310), (SOAN\*3120 or POLS\*3650)

*Restriction(s):* Registration in Criminal Justice & Public Policy (major, minor or area of concentration).

**SOC\*4200 Advanced Topics in Criminal Justice W (3-0) [0.50]**

An in-depth study of issues in criminal justice.

*Prerequisite(s):* (2 of SOC\*3490, SOC\*3710, SOC\*3730, SOC\*3740, SOC\*3750), (1 of ANTH\*3690, SOC\*2700, SOC\*3310), (SOAN\*3120 or POLS\*3650)

*Restriction(s):* Registration in Criminal Justice & Public Policy (major, minor or area of concentration).

**SOC\*4210 Advanced Topics in Rural Sociology U (3-0) [0.50]**

A critical examination of the research literature in rural sociology, both in industrial and industrializing societies.

*Prerequisite(s):* 12.50 credits including (SOAN\*2120 or GEOG\*2210), SOC\*2080

**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. (Offered in even-numbered years.)

*Prerequisite(s):* 12.50 credits including SOAN\*2120, SOC\*2080

**SOC\*4290 Applied Sociology U (2-1) [0.50]**

The application of sociological knowledge and research techniques to important policy issues in contemporary Canadian society.

*Prerequisite(s):* 12.50 credits including (ANTH\*3690 or SOC\*3310), SOAN\*3070, SOAN\*3120

**SOC\*4300 Theoretical and Methodological Issues W (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):* 15.00 credits including SOAN\*3070, SOAN\*3120, SOC\*3310

**SOC\*4310 Advanced Topics in Canadian Society U (3-0) [0.50]**

A detailed examination of selected topics in Canadian society such as regional tensions, aboriginal issues, implications of free trade, constitutional reform, social programs.

*Prerequisite(s):* 12.50 credits including (ANTH\*3690 or SOC\*3310), SOAN\*3070, SOC\*2010

**SOC\*4440 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):* 12.50 credits including SOC\*3310, SOAN\*3070, SOAN\*3120

**SOC\*4540 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):* 12.50 credits including SOC\*3310, SOAN\*3070, SOAN\*3120

<b>SOC*4640 Seminar in Sociology F,W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> 12.50 credits including SOC*3310, SOAN*3070, SOAN*3120
<b>SOC*4700 Seminar: Theoretical Issues in Sociology U (3-0) [0.50]</b>
An examination of selected theoretical issues. 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. <i>Prerequisite(s):</i> 12.50 credits including SOC*3310, SOAN*3070, SOAN*3120
<b>SOC*4740 Seminar in Sociology F,W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> 12.50 credits including SOC*3310, SOAN*3070, SOAN*3120
<b>SOC*4840 Seminar in Sociology F,W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> 12.50 credits including SOC*3310, SOAN*3070, SOAN*3120
<b>SOC*4880 Special Projects in Sociology S,F,W (3-0) [0.50]</b>
This special study/reading course option 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 project is required. <i>Prerequisite(s):</i> 12.50 credits <i>Restriction(s):</i> Instructor consent required. Please note, a student is allowed a total of 1.00 credits only for reading courses.
<b>SOC*4890 Special Projects in Sociology S,F,W (3-0) [0.50]</b>
This special study/reading course option 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 project is required. <i>Prerequisite(s):</i> 12.50 credits <i>Restriction(s):</i> Instructor consent required. Please note, a student is allowed a total of 1.00 credits only for reading courses.
<b>SOC*4900 Honours Sociology Thesis I S,F,W (3-0) [0.50]</b>
Development and design of an honours thesis proposal conducted under the supervision of a faculty member. Recommended to Honours students. <i>Prerequisite(s):</i> 15.00 credits including SOC*3310, SOAN*3070, SOAN*3120. CJPP students must have 15.00 credits including SOC*2700, SOAN*3120, or POLS*3650 <i>Restriction(s):</i> A cumulative average of 70% in all Sociology and Anthropology courses. Instructor consent required
<b>SOC*4910 Honours Sociology Thesis II S,F,W (3-0) [0.50]</b>
Completion and presentation of honours thesis. <i>Prerequisite(s):</i> SOC*4900 <i>Restriction(s):</i> Instructor consent required.

## 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\*2040 Globalization of Work and Organizations F,W (3-0) [0.50]

This course examines the sociological dimensions of work and occupations. Specific topics may include: the organizational context of work, occupational and labour market structures, job satisfaction, industrial relations, technological change, and the effects of gender, age, race/ethnicity on how work and employment are experienced.

*Prerequisite(s):* ANTH\*1150 or SOC\*1100

#### 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):* ANTH\*1150 or SOC\*1100

#### SOAN\*2111/2 Classical Theory F-W [1.00]

This course places in context and critiques the major world views which have shaped sociology. Particular attention is paid to the theories of Marx, Durkheim and Weber. This is a two-semester course offered over consecutive semesters. When you select it you must select SOAN\*2111 in the Fall semester and SOAN\*2112 in the Winter semester. A grade will not be assigned to SOAN\*2111 until SOAN\*2112 has been completed.

*Prerequisite(s):* ANTH\*1150 or SOC\*1100

#### 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

#### 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

#### SOAN\*2290 Identities and Cultural Diversity U (3-0) [0.50]

An examination of the interrelationships among Canadian ethnic, racial and linguistic groups including their locations in the Canadian mosaic.

*Prerequisite(s):* ANTH\*1150 or SOC\*1100

#### SOAN\*2400 Introduction to Gender Systems S,F (3-0) [0.50]

An introduction to the examination of the characteristics of gender relationships both historically and cross-culturally. Amongst the emphases are theoretical approaches to gender analysis, methodologies, case studies and attention to themes such as class and stratification, race and ethnicity, identities and global restructuring as these shape gender dynamics. (In spring semester offered through distance education format only.)

*Prerequisite(s):* ANTH\*1150 or SOC\*1100

#### SOAN\*3070 Qualitative and Observational Methods W (3-0) [0.50]

Non-quantitative techniques in social research including participant observation, unobtrusive methods, case studies and interviewing.

*Prerequisite(s):* SOAN\*2120

#### SOAN\*3100 Comparative Perspectives on Families and Households U (3-0) [0.50]

An exploration of how family relationships are shaped by the social context and social structure, and the theoretical frameworks used to study them. Topics may include historical development of the family, cross-cultural perspectives, family policy, household division of labour, abuse, divorce, parenthood, domestic ideology, sexuality, interracial families.

*Prerequisite(s):* (1 of ANTH\*2160, SOAN\*2111/2, SOAN\*2400), (SOAN\*2120 or equivalent or WMST\*3000)

*Restriction(s):* FRHD\*3120

#### SOAN\*3120 Quantitative Methods F (3-1) [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. Note: Students who have completed any other statistics course(s) should consult with the instructor. In some instances, SOC\*3120 may be waived as a departmental requirement.

*Prerequisite(s):* SOAN\*2120

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

#### SOAN\*3460 Ethnicity and Aging W (3-0) [0.50]

An examination of ethnic social structure, ethnicity, and aging. Variations in age related behaviour associated with ethnic groups in Canada will be viewed from a sociological and gerontological perspective. (Offered in odd-numbered years.)

*Prerequisite(s):* SOAN\*2111/2, SOAN\*2120, SOAN\*2290

#### SOAN\*3680 Development/Underdevelopment U (3-0) [0.50]

An examination of the process of social and economic development and underdevelopment, with special emphasis on the rural sector of countries in Africa, Latin America and Asia.

*Prerequisite(s):* 1 of ANTH\*2160, IDEV\*2010, SOC\*2080

*Restriction(s):* ANTH\*3680 . Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

#### SOAN\*4220 Canadian Rural Women F (3-0) [0.50]

An examination of socio-cultural structures and processes affecting the positions and roles of rural women in Canada. Starting from an historical perspective, special emphasis will be given to the study of farm and native women, and changes in their familial, economic, social and political roles. (Offered in odd-numbered years.)

*Prerequisite(s):* 12.50 credits including (ANTH\*2160 or SOC\*2080), (SOAN\*2120 or WMST\*3000)

#### SOAN\*4240 Women and the Development Process U (3-0) [0.50]

To increase students' understanding of the relation of socio-economic, political and cultural changes on the roles of women in "developing areas" and how women, in turn, affect socio-economic changes.

*Prerequisite(s):* 12.50 credits including (1 of ANTH\*3400, IDEV\*2010, SOAN\*3680), (1 of SOAN\*3070, SOAN\*3120, WMST\*3000)

#### SOAN\*4320 Transition from School to Work W (3-0) [0.50]

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 "Action Sociology/Anthropology Project," as well as a "Skills Portfolio," and other work related to their own transition.

*Restriction(s):* Registration in Sociology, Anthropology or Criminal Justice & Public Policy majors in semester 7 or 8.

#### SOAN\*4500 Community Development U (3-0) [0.50]

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.

*Prerequisite(s):* (1 of ANTH\*2160, IDEV\*2010, SOC\*2080), (GEOG\*2210 or SOAN\*2120)

*Restriction(s):* SOAN\*3300

## Soil Science

*Department of Land Resource Science*

### **SOIL\*2010 Soil Science W (3-2) [0.50]**

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. This course is not for B.Sc.(Agr.) students. (Also offered through distance education format.)

### **SOIL\*2120 Introduction to Environmental Stewardship F (3-2) [0.50]**

An introduction to the concepts of resources 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. Discussion of the concept of stewardship as an environmental ethic. (Also offered through distance education format.)

### **SOIL\*3000 Environmental Issues in Agriculture and Landscape Management W (3-2) [0.50]**

This course provides an introduction to a range of specific environmental and resource issues in agriculture and landscape management. Issues to be covered include geological resources, climate change, nutrient management, groundwater contamination, source water protection, land use planning, and natural resources management.

*Prerequisite(s):* AGR\*2320 or SOIL\*2010

*Equate(s):* AGR\*2301 , SOIL\*2200

### **SOIL\*3030 Tutorials in Organic Agriculture 1 F (3-2) [0.50]**

Building on the introductory exposure offered in CROP\*2050, this course will rely on lectures and small group mentoring to stimulate independent, learner-centered analysis of selected topics in organic agriculture. Students will participate in an interdisciplinary analysis of case-study topics offered in the form of two, 6 week modules on biophysical and social issues, including composting and crop rotations as well as socio-political and marketing forces bearing on organics. The goal is to encourage holistic, systematic thinking in students learning to become self-directed analysts and decision-makers. Seminar periods will support both guest speakers and student presentations.

*Prerequisite(s):* CROP\*2050

### **SOIL\*3050 Land Utilization F (3-1) [0.50]**

Principles of land utilization and planning at the global, national, regional and local levels. Land characterization and classification using photo-interpretive techniques and computerized soil survey interpretive programs. Land capability/suitability for agriculture, forestry and engineering purposes. Emphasis on specific land use issues in Canada.

*Prerequisite(s):* 1 of AGR\*2301/2 , AGR\*2320, GEOG\*1300, GEOL\*1000 , SOIL\*2010

### **SOIL\*3060 Environmental Soil Chemistry F (3-2) [0.50]**

The formation and properties of clay minerals and organic matter; ionic exchange, soil acidity, and alkalinity, oxidation and reduction potential, and dissolution and precipitation. Laboratory sessions will illustrate principles of soil chemistry.

*Prerequisite(s):* 1 of AGR\*2301/2 , AGR\*2320, SOIL\*2010

### **SOIL\*3070 Environmental Soil Physics F (3-3) [0.50]**

Practical aspects of water movement and contaminant transport in soils. Hands-on experience with standard laboratory and field methods of measuring soil physical properties. Applications of soil physics in characterizing pathogen and nutrient transport to groundwater, landfill cap and linear design, turf management.

*Prerequisite(s):* 1 of MATH\*1080, AGR\*2301/2 , SOIL\*2010

### **SOIL\*3080 Soil and Water Conservation F (2-3) [0.50]**

A lecture-demonstration course on 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. Reclamation of severely disturbed soils and saline-sodic soils. Emphasis will be on concepts and solutions to problems in a systems approach. (Also offered through distance education format.)

*Prerequisite(s):* 1 of AGR\*2301/2 , AGR\*2320, SOIL\*2010

### **SOIL\*3100 Resource Planning Techniques W (2-2) [0.50]**

An intermediate techniques course directed at the application of a systematic approach to problem-solving in natural resource management. Major topics include procedures of ecological land classification, computer-assisted resource analysis and environmental impact assessment.

*Prerequisite(s):* SOIL\*3050

### **SOIL\*3170 Soil Processes in Landscape F (3-3) [0.50]**

This course examines factors and processes that influence soil development, including the impact of human activities. Special attention is given to understanding the significance of soil properties and features, with emphasis on their spatial and temporal variability on local to global scales. Principles of soil classification are discussed and several classification systems are examined; emphasis is given to the Canadian System of Soil Classification. The roles of remote sensing, landform analysis, soil imaging (micropedology), digital image analysis, as well as geographic information systems, in quantifying soils and landscapes, are also presented. Field trips taken to observe specific soils and landscapes in southern Ontario; a fee is charged to help offset costs of this activity.

*Prerequisite(s):* 1 of AGR\*2320, AGR\*2301/2 , SOIL\*2010

*Restriction(s):* SOIL\*4170

### **SOIL\*3200 Environmental Soil Biology W (3-3) [0.50]**

Soil biological processes involving both microflora and fauna with emphasis on waste management, soil fertility and structure, plant residue decomposition and xenobiotic compound biodegradation. Students will apply this knowledge in a project involving biodegradation of an organic waste.

*Prerequisite(s):* 10.00 credits including AGR\*2301/2 or SOIL\*2010

### **SOIL\*3300 Land Resource Stewardship S (3-0) [0.50]**

This course will examine 'stewardship' programs as an approach to environmental conservation in both the agricultural and natural resource conservation sectors in Canada. It will focus on the central role of private landowners, with emphasis on the voluntary policy perspective of stewardship programs in comparison to regulatory perspectives. As well, it will examine the non-government organizations such as land trusts and farm organizations that often run stewardship programs. Programs addressing environmental conservation issues in agriculture, forestry, fisheries, wildlife, habitat conservation, and species at risk will be considered. (Offered through distance education format only.)

*Prerequisite(s):* SOIL\*2120 or SOIL\*2200

### **SOIL\*3600 Remote Sensing W (3-3) [0.50]**

An introduction to remote sensing, as applied to the study and monitoring of the biophysical environment (atmosphere, vegetation, soil, hydrology, geology). Relevant conventional photographic techniques are examined, but current analog and digital imaging technologies are emphasized. Attention is given to both airborne and earth-orbiting imaging platforms. Key aspects of computerized image analysis are covered. Practical experience is gained through the interpretation of high-resolution digital imagery, using industry-standard commercial software.

*Prerequisite(s):* 10.00 credits (recommend: 1 of GEOG\*2420, AGR\*2301/2 , AGR\*2320, SOIL\*2010)

*Restriction(s):* Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

### **SOIL\*4070 Problems in Land Resource Science S,F,W (0-6) [0.50]**

Students will carry out a research project in an area of special interest. Individualized supervision will be provided by a faculty member. The preparation of an oral and/or written report will be required. Approval to take this course must be obtained from the Department Chair during the previous semester.

*Prerequisite(s):* AGR\*2320 or ENVS\*2010 and 1.00 credits at the 3000 or higher level in soil science, geology or meteorology

*Restriction(s):* Department chair consent required.

### **SOIL\*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, SOIL\*2010

**SOIL\*4110 Natural Resources Management Field Camp F (0-6) [0.50]**

A course directed toward investigating methods of collecting and processing land resource field data. Practice in mapping information from air photographs and ground surveys, construction of inventory maps and integration of information. The course will consist of a one week field camp prior to the fall semester, following which the students, working in groups, will prepare and present a comprehensive report in consultation with faculty. Students will be responsible for their living and transportation expenses for the field session, in addition to regular tuition fees. The course may be offered with different emphasis in content depending on student demand. Students are required to notify the designated departmental instructor of their intention to participate in the Field Camp during the previous Winter semester (or earlier if going on exchange programs).

*Prerequisite(s):* SOIL\*3100

*Restriction(s):* Registration in B.Sc.Env.NRM and B.Sc.Agr.AGMN students.

**SOIL\*4160 Design of Organic Production Systems F (2-3) [0.50]**

This interdisciplinary course calls upon students to use the analytical framework developed in Tutorials in Organic Agriculture I and II to apply organic principles to managed agroecosystems. The course covers the interactions of soils, plants, microbes, and animals with management and environmental factors related to annual and perennial crops and livestock. The core principle of problem avoidance rather than problem solving is illustrated with practical examples from such dimensions as integration of crop and livestock agriculture, farm-scale nutrient budgeting, permaculture, and herd health in the production of organic field crops (grains and oilseeds), horticultural crops (fruit and vegetables), and livestock (beef, sheep, dairy, pigs, chickens).

*Prerequisite(s):* (1 of AGR\*2350, CROP\*4220, SOIL\*3170) or (CROP\*3130, SOIL\*3030)

**SOIL\*4210 Earth and Atmospheric Science Field Camp F (1-3) [0.50]**

A course restricted to students in the Earth and Atmospheric Science major giving experience in collecting and processing field data. A complete environmental impact assessment including geology and soil classification, topographical survey using GPS, air photo and satellite image analysis, identification of plant species, and measurement of soil hydrologic properties. The course will consist of a one week field camp prior to the fall semester, following which the students, working in groups, will prepare and present a comprehensive environmental impact assessment. The field camp will be held within an easy daily driving distance to Guelph. Students are required to notify the designated departmental instructor of their intention to participate in this course during the previous winter semester (or earlier if going on exchange programs).

*Prerequisite(s):* 3 of GEOL\*3060, GEOL\*3190, SOIL\*3060, SOIL\*3070, SOIL\*3200, SOIL\*4170

*Restriction(s):* SOIL\*4110

**SOIL\*4250 Soils in the Landscape F (3-3) [0.50]**

This course has field, laboratory and classroom components. It focuses on soil spatial and temporal variability, evaluating soil properties in relation to controlling factors and processes, on local to global scales. Students are exposed to standard procedures for collecting soil data in the field and laboratory, highlighting sampling design and data extrapolation, as well as relevant applications of digital imaging of soil (micropedology) and landscapes. Principles of soil classification are discussed and several systems are introduced, emphasizing the Canadian System of Soil Classification; key concepts associated with the production of soil maps and reports, as well as the role of geographic information systems in archiving and interpreting soil information, are also examined. Students are required to notify the designated departmental instructor, of their intention to participate in this course, during the previous winter semester (or earlier, if going on exchange programs). This course has field camps which run during the week preceding the Fall semester. A fee is charged to partially cover costs of field activities.

*Prerequisite(s):* 1 of SOIL\*3060, SOIL\*3070, SOIL\*3080, SOIL\*3200, GEOL\*3130

*Equate(s):* SOIL\*3170, SOIL\*4170

*Restriction(s):* B.Sc.(Agr.) Agroecosystem Management or B.Sc.(Env.) Earth and Atmospheric Science majors. Instructor consent required.

## Spanish Studies

### *School of Languages and Literatures*

*Except where stated otherwise, 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 F,W (3-1) [0.50]**

A course providing the basics of spoken and written Spanish for students with no previous studies in the language.

#### **SPAN\*1110 Intermediate Spanish F,W (3-1) [0.50]**

A continuation of SPAN\*1100 with emphasis on oral work.

*Prerequisite(s):* SPAN\*1100

#### **SPAN\*2000 Spanish Language I F (3-1) [0.50]**

A course designed to develop facility in reading, writing, understanding and speaking Spanish. Conversation, grammar and language laboratory practice.

*Prerequisite(s):* Grade 12 (4U) Spanish or SPAN\*1110 (or equivalent)

#### **SPAN\*2010 Spanish Language II W (3-1) [0.50]**

A continuation of SPAN\*2000.

*Prerequisite(s):* SPAN\*2000

#### **SPAN\*2040 Spanish Civilization F (3-0) [0.50]**

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.

*Prerequisite(s):* SPAN\*1110 or 4U Spanish

*Restriction(s):* Instructor consent required.

#### **SPAN\*2990 Hispanic Literary Studies W (3-0) [0.50]**

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):* SPAN\*1110 or 4U Spanish

*Restriction(s):* Instructor consent required.

#### **SPAN\*3080 Spanish American Culture W (3-0) [0.50]**

A survey through selected readings, class discussion and audio-visual materials of the Spanish American countries, their histories, society, institutions and culture.

*Prerequisite(s):* SPAN\*1110 or 4U Spanish

*Restriction(s):* Instructor consent required.

#### **SPAN\*3110 Spanish Literature F (3-0) [0.50]**

This course will study the works of prominent 20th-century poets in the context of the artistic environment of Europe as reflected in the theatre, art and film of the first two decades of the 20th century. Focus will be on poets including: Garcia Lorca, Vicente Aleixandre, Gerardo Diego; painters Salvador Dali and Pablo Picasso, and film director Luis Buñuel. (Offered in even-numbered years.)

*Prerequisite(s):* SPAN\*2990

*Restriction(s):* Instructor consent required.

#### **SPAN\*3120 Post-Civil War Literature and Film W (3-0) [0.50]**

This course examines contemporary Spanish Literature and film from a socio-political perspective. It will focus on the following topics: the impact on narrative and theatre of socio-cultural upheavals in the aftermath of the civil war; the role in the aesthetics of both film and literature of the Franco dictatorship and censorship in particular; the importance of post-Franco liberalization on women's creative work. (Offered in odd-numbered years.)

*Prerequisite(s):* SPAN\*2990

*Restriction(s):* Instructor consent required.

#### **SPAN\*3130 Women in Modern Spanish Fiction W (3-0) [0.50]**

A study of the representation of women in Spanish literature through the analysis and interpretation of Spanish 19th-century novels. (Offered in even-numbered years.)

*Prerequisite(s):* SPAN\*2990

*Restriction(s):* Instructor consent required.

#### **SPAN\*3160 Contemporary Latin American Fiction W (3-0) [0.50]**

This course will examine, in English, why and how the leading figures, such as Borges, Cortazar, Garcia Marquez, Carpentier, Isabel Allende, and Luisa Valenzuela have "made" history, not only in the way they have recreated the Latin American historical reality, but also in the way they have reformed the Hispanic literature. Two lectures per week in English and one seminar per week in Spanish. Final essay and examination will be in English, short presentations and compositions will be in Spanish. (Offered in odd-numbered years.)

*Restriction(s):* HUMN\*3160

#### **SPAN\*3170 Women, Virtue and Honour in Spanish Drama F (3-0) [0.50]**

This is a topic-oriented course which will study, in English, major Spanish dramas: seventeenth-century works such as Lope de Vega's Fuenteovejuna, Calderon's Life is a Dream, Tirso de Molina's Don Juan, and twentieth-century plays such as Garcia Lorca's The House of Bernarda Alba and Blood Wedding. In addition to the thematic focus, these texts will be studied for their artistic merit and for the specificity of the Spanish "comedia". Where appropriate, this course will also discuss the influence of Spanish themes on the European culture. Texts and examinations will be in English, but selected readings and assignments will be in Spanish. Students who select the course under the listing of HUMN\*3170 will do assignments in English. (Offered in even-numbered years.)

*Restriction(s):* HUMN\*3170

#### **SPAN\*3180 Cuento/Journalism Spanish American W (3-0) [0.50]**

Most Latin American writers started their careers as journalists, and short stories by Jorge Luis Borges, Julio Cortázar, Gabriel Garcia Márquez, Elena Poniatowska, Luisa Valenzuela, and Isabel Allende were published in daily newspapers. One of the results of the close link between journalism and fiction is a deep sense of social responsibility in modern non-representational literature. This course will study twentieth-century Latin American short stories for their artistic merits, and for their other links to journalistic discourse. (Offered in even-numbered years.)

*Prerequisite(s):* SPAN\*2990

*Restriction(s):* Instructor consent required.

#### **SPAN\*3300 Modern Spanish American Prose F (3-0) [0.50]**

A study, through selected texts, of the most important aspects of Spanish American Prose up to 1940. Authors studied may include Maria Luisa Bombal, Horacio Quiroga, Jorge Icaza, Romulo Gallegos and Ricardo Guiraldes. The course will emphasize themes such as rural life, the role of native peoples, and changing attitudes to concepts such as national identity, urbanization and literary technique. (Offered in odd-numbered years.)

*Prerequisite(s):* SPAN\*2990

*Restriction(s):* Instructor consent required.

#### **SPAN\*3310 The Modern Spanish American Short Story and Poetry F (3-0) [0.50]**

A study of the modern Spanish American short story and an examination of the evolution of poetry among the leading Modernist and post-Modernist poets. (Offered in even-numbered years.)

*Prerequisite(s):* SPAN\*2990

*Restriction(s):* Instructor consent required.

#### **SPAN\*3500 Spanish Grammar and Composition I F (3-0) [0.50]**

An advanced language course that focuses on the refinement of students' written and verbal communication skills in Spanish.

*Prerequisite(s):* SPAN\*2010

#### **SPAN\*3530 Business Spanish W (3-0) [0.50]**

A detailed study of the Spanish language as it is currently used in administration and business. It will cover areas such as administrative correspondence, reports, employment, business communication and advertising.

*Prerequisite(s):* SPAN\*3500

#### **SPAN\*3800 Directed Readings in Spanish 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 in Spanish literature at the 3000 level

*Restriction(s):* Instructor consent required.

#### **SPAN\*3810 Directed Readings in Spanish 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 in Spanish literature at the 3000 level

*Restriction(s):* Instructor consent required.

#### **SPAN\*3820 Directed Readings in Spanish 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 in Spanish literature at the 3000 level

*Restriction(s):* Instructor consent required.

**SPAN\*3850 Revolutionary Poetry and Poetic Revolution in Spanish America F (3-0) [0.50]**

This course studies the poetry that has emerged from revolutionary movements in Cuba, Nicaragua, Chile and elsewhere, situating this poetry in the context of the search for new poetic forms. (Offered in even-numbered years.)

*Prerequisite(s):* SPAN\*2990 or instructor consent required.

**SPAN\*4170 Don Quixote and the Picaresque Novel F (3-0) [0.50]**

This course will study, in English, the importance of this Spanish masterpiece in the development of the modern European novel, and it will examine the first European picaresque work, *Lazarillo de Tormes*, in the light of the picaresque tradition which followed in Europe and the Americas. The course will also concentrate on the notion of play and laughter (Bakhtin) as means of survival. Texts and examinations will be in English, but selected readings and assignments will be in Spanish. Students who select the course under the listing of HUMN\*4170 will do assignments in English. (Offered in odd-numbered years.)

**SPAN\*4200 Spanish American Sociolinguistics F (3-0) [0.50]**

An introduction to the study of language variation in Latin American Spanish in its social context. Major topics include theoretical and practical concepts of linguistic variation, linguistic change, standard, prescriptive versus non-prestigious varieties, bilingualism, diglossia, language attitude, code-switching, language planning, conversation analysis and language shift. (Offered in odd-numbered years.)

*Prerequisite(s):* SPAN\*2010, LING\*1000

**SPAN\*4500 Spanish Translation and Composition I F (3-0) [0.50]**

An advanced composition course, with intensive written and oral practice with an emphasis on translation.

*Prerequisite(s):* SPAN\*3530

**SPAN\*4520 Spanish Translation and Composition II W (3-0) [0.50]**

A continuation of the work done in SPAN\*4500, developing creative oral and written expression with an emphasis on translation.

*Prerequisite(s):* SPAN\*4500

**SPAN\*4840 Research Paper in Spanish Studies U (3-0) [0.50]**

A research paper in Spanish on any language or literature subject approved by the department. This paper will be the equivalent of a semester course.

## Statistics

*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 , 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\*2010, PSYC\*3320, .

### **STAT\*2040 Statistics I S,F,W (3-2) [0.50]**

A course stressing the practical methods of Statistics. Topics include: descriptive statistics; univariate models such as binomial, Poisson, uniform and normal; 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; ANOVA for CRD and RCBD. Assignments will deal with real data from the natural sciences. Laboratory sessions involve statistical computing and visualization using appropriate statistical software.

*Prerequisite(s):* 1 of 4U Advanced Functions and Calculus, OAC calculus, equivalent

*Restriction(s):* STAT\*1000 , STAT\*2060, STAT\*2080, STAT\*2100 , STAT\*2120

### **STAT\*2050 Statistics II S,F,W (3-2) [0.50]**

The methods of STAT\*2040 are extended to the multi-sample cases. Methods include: simple and multiple regression analysis including ANOVA and lack-of-fit; experimental design including analysis for CRD, RCBD, LSD, SPD and factorial experiments with interaction; ANCOVA; Bioassay. Assignments employing data from the natural sciences will be processed in the microcomputer laboratory.

*Prerequisite(s):* STAT\*2040 or STAT\*2100 (or equivalent)

*Restriction(s):* STAT\*2090, STAT\*2250

### **STAT\*2060 Statistics for Business Decisions W (3-2) [0.50]**

A course 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. (Also offered through distance education format.)

*Prerequisite(s):* (1 of 4U mathematics, OAC mathematics, equivalent) or 0.50 credit in mathematics

*Restriction(s):* STAT\*1000 , STAT\*2040, STAT\*2080, STAT\*2100 , STAT\*2120

### **STAT\*2080 Introductory Applied Statistics I F (3-2) [0.50]**

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. Illustrated with examples from a variety of disciplines, including family studies, education, marketing, medicine, psychology and sociology.

*Prerequisite(s):* (1 of 4U mathematics, OAC mathematics, equivalent) or 0.50 credit in mathematics

*Restriction(s):* STAT\*1000 , STAT\*2040, STAT\*2060, STAT\*2100 , STAT\*2120

### **STAT\*2090 Introductory Applied Statistics II W (3-2) [0.50]**

Design of sample surveys. Analysis of qualitative data. Analysis of variance for designed experiments. Multiple regression and analysis of covariance. Some non-parametric methods. Survey of special topics such as factor analysis and cluster analysis.

*Prerequisite(s):* STAT\*2080

*Restriction(s):* STAT\*2050

### **STAT\*2120 Probability and Statistics for Engineers W (3-1) [0.50]**

Sample spaces. Probability, conditional probability, 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, correlation. Introduction to quality control and reliability. Recommended especially for students in the B.Sc.(Eng.) program.

*Prerequisite(s):* 1 of MATH\*1010 , MATH\*1210, MATH\*2080, IPS\*1210

*Restriction(s):* STAT\*1000 , STAT\*2040, STAT\*2060, STAT\*2080, STAT\*2100

### **STAT\*2250 Biostatistics and the Life Sciences W (3-2) [0.50]**

This course in biostatistical methods will emphasize the design of research projects, data gathering, analysis and the interpretation of results. Statistical concepts underlying practical aspects of biological research will be acquired while working through the process of scientific enquiry. Weekly computer laboratory sessions will focus on practical data visualization and statistical analysis using computer statistical packages. Simple parametric and nonparametric methods are reviewed, followed by more advanced topics that will include some or all of the following: two factor ANOVA and multiple regression, and introductions to discriminant analysis, cluster analysis, principal components analysis, logistic regression, and resampling methods. (Also listed as BIOL\*2250.) Departments of Mathematics and Statistics and Zoology.

*Prerequisite(s):* STAT\*2040 or STAT\*2100

*Equate(s):* BIOL\*2250

*Restriction(s):* STAT\*2050

### **STAT\*3100 Introductory Mathematical Statistics I F (3-0) [0.50]**

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):* ( IPS\*1210 or MATH\*1210 ), (STAT\*2040 or STAT\*2100 )

### **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

### **STAT\*3210 Experimental Design W (3-0) [0.50]**

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.

*Prerequisite(s):* STAT\*2050, STAT\*3240

*Restriction(s):* STAT\*4220

### **STAT\*3240 Applied Regression Analysis F (3-2) [0.50]**

Theory and applications of regression techniques; linear, non-linear and multiple regression and correlation; analysis of residuals; other statistical techniques including: response surfaces and covariance analysis, prediction and time-series analysis. The computer lab involves interactive data analysis and investigation of the methodology using SAS and/or S-PLUS statistical software.

*Prerequisite(s):* ( IPS\*1210 or MATH\*1210 ), (MATH\*2150 or MATH\*2160, may be taken concurrently or with instructor consent), (STAT\*2050 or STAT\*2100 )

### **STAT\*3320 Sampling Theory with Applications F (3-0) [0.50]**

Non-probability and probability sampling. Simple random sampling, stratified sampling, cluster sampling, systematic sampling, double sampling, two-phase sampling, multi-stage cluster sampling. Expectation and variance estimation procedures and applications of above techniques.

*Prerequisite(s):* ( IPS\*1210 or MATH\*1210 ), (1 of STAT\*2050, STAT\*3240, STAT\*3100)

### **STAT\*3510 Environmental Risk Assessment W (3-0) [0.50]**

Contemporary statistical methods for assessing risk, including dose-response models, survival analysis, relative risk analysis, bioassay, estimating methods for zero risk, trend analysis, survey of models for assessing risk. Case studies illustrate the methods.

*Prerequisite(s):* (1 of IPS\*1110 , MATH\*1000, MATH\*1080, MATH\*1200), (STAT\*2050 or STAT\*2250)

### **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. Intended for statistics students and interested students in other disciplines with appropriate previous courses in statistics. Information on particular offerings will be available at the beginning of each academic year. (Offered in odd-numbered years.)

*Prerequisite(s):* STAT\*3110, STAT\*3240

### **STAT\*4060 Topics in Applied Statistics II W (3-0) [0.50]**

Same as for STAT\*4050. (Offered in even-numbered years.)

*Prerequisite(s):* STAT\*3110, STAT\*3240

**STAT\*4080 Data Analysis F (3-2) [0.50]**

Principles of statistical modelling; the likelihood function; model fitting; model choice; analysis of non-normal data; generalized linear models; binomial regression models; regression models for counts; Poisson and multinomial data; overdispersion. Statistical modelling and analysis using appropriate software (eg. Splus and/or SAS) in the computing lab.

*Prerequisite(s):* (MATH\*2150 or MATH\*2160), STAT\*3110, STAT\*3240

**STAT\*4100 Survival Analysis W (3-1) [0.50]**

Theory and methodology of survival analysis. A set of techniques for modelling the time of a well-defined event (typically failure or death), and for dealing with censored data. The emphasis will be on regression, including parametric, proportional hazards and accelerated life regression models. Areas of application include environmental sciences, medicine, industrial reliability, and economics, where the events of interest may be respectively early death, organ failure, component failure, or strikes. Students will learn specialized techniques for modelling censored data and understand why they are necessary. The interpretation of real data will be emphasized throughout the course. Statistical computing packages (S-Plus or SAS) will be used extensively.

*Prerequisite(s):* STAT\*3110 and STAT\*3240

**STAT\*4340 Statistical Inference W (3-0) [0.50]**

This course on methods of statistical inference reviews and extends the theory of estimation introduced in STAT\*3110: interval estimation tests for simple and composite hypotheses, likelihood ratio tests. Recent likelihood concepts as well as classical large sample theory, asymptotics and approximations and their applications are covered. This material is directly relevant to current research and applications in areas as diverse as survival analysis, nonparametric regression and environmetrics.

*Prerequisite(s):* STAT\*3110, STAT\*3240

**STAT\*4350 Applied Multivariate Statistical Methods F (3-0) [0.50]**

Samplings from the multivariate normal distribution, Wishart and Hotelling's  $T^2$  distribution statistical inference on the mean vector, canonical correlations, multivariate analysis of variance and covariance, multivariate regression, principal components analysis, factor analysis. Topics will be illustrated using examples from various disciplines.

*Prerequisite(s):* (MATH\*2150 or MATH\*2160), STAT\*3110, STAT\*3240

**STAT\*4360 Applied Time Series Analysis W (3-2) [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.

*Prerequisite(s):* STAT\*3240 or instructor consent

**STAT\*4510 Advanced Risk Analysis F (3-0) [0.50]**

Measures of risk, 2x2 tables, combining 2x2 tables, trend tests, combination and time dependent bioassays, joint action toxicity models, teratology and estimation of survival functions. Extensive use will be made of SAS and/or S-plus. Course is based on real data in risk analysis.

*Prerequisite(s):* STAT\*3240, STAT\*3510

## 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 both SART\*1050 and SART\*1060.*

*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 of Fine Art and Music by payment of a lab fee. The amount of the fee is established for each semester prior to registration.*

*Note: Due to limited faculty resources and facilities, enrolment in these courses may be restricted to Studio Art majors or minors.*

#### **SART\*1050 Integrated 2-D Media F,W (0-6) [0.50]**

A studio-based investigation into the fundamental concepts, principles and elements of two-dimensional visual structure and expression. Assigned projects, in-class exercises, slides, lectures and critiques will introduce the student to aspects of both traditional and contemporary practice.

*Restriction(s):* Registration in semesters one, two, three or four. May not register in SART\*1060 in same term.

#### **SART\*1060 Media Convergence F,W (0-6) [0.50]**

An introduction to the basic aspects of three-dimensional and time-based art production. Various topics, materials, and diverse approaches will be investigated through assigned problems, lectures, and critiques.

*Equate(s):* SART\*2040

*Restriction(s):* Registration in semesters one, two, three or four. May not register in SART\*1050 in same term.

#### **SART\*2090 Drawing I F,W (0-6) [0.50]**

An introduction to the basic concepts, techniques and media of drawing, through disciplined observational and imaginative study.

*Prerequisite(s):* SART\*1050 or SART\*1060

#### **SART\*2200 Painting I F,W (0-6) [0.50]**

Introduces various technical and aesthetic issues of painting, with an emphasis placed on representational strategies. Diverse approaches will be investigated through specific studio assignments in acrylic and oil-based media on various painting supports. Prior or concurrent Drawing classes are recommended.

*Prerequisite(s):* SART\*1050

#### **SART\*2300 Sculpture I F,W (0-6) [0.50]**

An introduction to contemporary sculptural concerns through projects and readings. Students will be actively engaged in exploring a variety of materials and ideas including modular construction, casting, and scale exercises.

*Prerequisite(s):* SART\*1060

#### **SART\*2460 Introductory Printmaking I F (0-6) [0.50]**

An introduction to the traditional printmaking media of intaglio and relief printing.

*Prerequisite(s):* SART\*1050

#### **SART\*2470 Introductory Printmaking II W (0-6) [0.50]**

An introduction to the techniques of the traditional printmaking media of lithography and silkscreen.

*Prerequisite(s):* SART\*1050

#### **SART\*2610 Photography I F,W (0-6) [0.50]**

An introduction to the creative application of photography in art; and, the basic principles of dark-room and camera skills.

*Prerequisite(s):* SART\*1050 or SART\*1060

*Restriction(s):* Registration in semesters two to five.

#### **SART\*2700 Introduction to Computer Graphics F (0-6) [0.50]**

This course will extend the conceptual, technical, and aesthetic issues of studio art into the field of computer imaging. Drawings, photographs, and other found images will be scanned into the computer and digitally manipulated. Some computer experience is recommended.

*Prerequisite(s):* SART\*1050

#### **SART\*2710 Drawing Graphics on the Computer W (0-6) [0.50]**

An introduction to creating original graphics on the computer using a vector graphics program. Bringing traditional drawing and painting skills into the computer, students will produce original drawings and designs using vector graphics, bezier curves, compound paths, and multiple filters. Some computer experience is recommended.

*Prerequisite(s):* SART\*1050

#### **SART\*2800 Extended Media I F,W (0-6) [0.50]**

Basic video and digital audio editing will be integrated with other media, art forms, and issues such as performance, alternative venues, and installation, while emphasizing interdisciplinary and alternative approaches to contemporary art practice.

*Prerequisite(s):* SART\*1060

*Restriction(s):* Registration in semesters two to five.

#### **SART\*3090 Drawing II F,W (0-6) [0.50]**

An extension of SART\*2090 which attempts to foster understanding of the basic skills and technical issues necessary to the making of drawings while introducing the philosophical and critical issues related to the discipline.

*Prerequisite(s):* SART\*1050, SART\*1060, SART\*2090

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

#### **SART\*3200 Painting II F,W (0-6) [0.50]**

An extension of the work begun in SART\*2200. The various technical and aesthetic issues of representational painting will be further investigated as will the diverse approaches to pictorial organization derived from observation. However, the issues of abstraction and other forms of non-representational approaches will be introduced and developed in a deeper and fuller attempt to explore the possibilities available to the painter in the late 20th century.

*Prerequisite(s):* SART\*1050, SART\*1060, SART\*2200

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

#### **SART\*3300 Sculpture II F,W (0-6) [0.50]**

A technical course in which specific tools of the wood and metal shops will be studied in depth through assignments. Conceptual issues will be examined in relation to the creation of objects.

*Prerequisite(s):* SART\*1050, SART\*1060, SART\*2300

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

#### **SART\*3410 Intaglio W (0-6) [0.50]**

In-depth investigation into aspects of intaglio printmaking.

*Prerequisite(s):* SART\*1050, SART\*1060, (SART\*2460 or SART\*2470)

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

#### **SART\*3450 Lithography F (0-6) [0.50]**

In-depth exploration of the art of lithography.

*Prerequisite(s):* SART\*1050, SART\*1060, (SART\*2460 or SART\*2470)

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

#### **SART\*3470 Photo-Printmaking W (0-6) [0.50]**

An investigation into the uses of photographic resources in image making to produce photo etchings, silk-screens, and lithographs. Basic darkroom skills will be directed toward the production of graphic arts film, use of the stat camera, and various photo techniques. (Offered in odd-numbered years.)

*Prerequisite(s):* SART\*1050, SART\*1060, (SART\*2460 or SART\*2470)

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

#### **SART\*3480 Web Development and Design F (0-6) [0.50]**

An in-depth study of website design using professional web authoring software. Students will design and create a website which explores a contemporary issue in their art practice.

*Prerequisite(s):* SART\*1050, SART\*1060, (SART\*2700 or SART\*2710)

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*3750 Photography II F,W (0-6) [0.50]**

A further exploration of expressive, formal and technical aspects of photography. Students without the stated prerequisite but with equivalent experience should consult the instructor.

*Prerequisite(s):* SART\*1050, SART\*1060, SART\*2610

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*3770 Extended Media II F,W (3-0) [0.50]**

Further investigations into interdisciplinary alternative approaches to contemporary practice. Digital video editing will be integrated with other art forms and issues such as audio, performance, alternative venues, and installation.

*Prerequisite(s):* SART\*1050, SART\*1060, SART\*2800

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*3800 Experiential Learning F,W (0-0) [0.50]**

An independent study course based on either Studio Art related voluntary or paid practical experience. Evaluation will be based on assignments related to work duties. Written proposals, signed by the instructor, 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 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 of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts. Instructor consent required.

**SART\*4090 Drawing III F (0-6) [0.50]**

Continuation of the various skills and technical issues necessary to the making of drawings. Observational drawing from the model, still life, natural forms, and interiors will be studied with a view to understanding the language and philosophical implications inherent within drawings of different styles.

*Prerequisite(s):* SART\*3090

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4100 Drawing IV W (0-6) [0.50]**

An advanced drawing course which explores a wider range of graphic experience including abstract, imaginary and other non-representational approaches to graphic discipline in our own time.

*Prerequisite(s):* SART\*4090

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4200 Painting III F (0-6) [0.50]**

A further extension of the work begun in SART\*2200 and SART\*3200. While the various technical and aesthetic issues will continue to be investigated through the discipline of observational painting there will be more emphasis on the critical issues relevant to contemporary painting and allowance for personal expression through both abstract and representational modes.

*Prerequisite(s):* SART\*3200, SART\*3210

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4210 Painting IV W (0-6) [0.50]**

Advanced investigations into the role of observational study and strong emphasis on critical issues of contemporary painting whether representational, abstract, mixed-media, or other.

*Prerequisite(s):* SART\*4200 or SART\*4230

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4230 Special Topics in Painting W (0-6) [0.50]**

An advanced course which focuses on a specific theme, subject, or technique in painting. Topics may include the figure and narrative in painting, the landscape in contemporary painting, or New Abstraction.

*Prerequisite(s):* SART\*3200

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4300 Sculpture III F,W (0-6) [0.50]**

Contemporary issues in sculpture will be addressed through at least 2 studio projects including 1 site-response installation, and an independent work in close consultation with the instructor. Interdisciplinary projects based on the students' own research are strongly encouraged.

*Prerequisite(s):* SART\*3300

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4310 Sculpture IV F,W (0-6) [0.50]**

In close consultation with the instructor, the student will produce a body of independent sculpture with attention to clarity of personal statement, originality, and professionalism. Interdisciplinary projects based on the students' own research are strongly encouraged.

*Prerequisite(s):* SART\*4300

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4410 Experimental Printmaking F,W (0-6) [0.50]**

Further investigations into traditional and photo based printing media. Use of computer graphics to augment the design process.

*Prerequisite(s):* 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 of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4450 Advanced Printmaking F,W (0-6) [0.50]**

Continuing in-depth investigation into various printmaking media, including the use of computer graphics and advanced manipulation of photo based images to create a thematically coherent portfolio of prints.

*Prerequisite(s):* SART\*4410

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4700 Photography III F,W (0-6) [0.50]**

An introduction to colour photography and a continuing investigation of the formal, technical and theoretical issues of contemporary photography.

*Prerequisite(s):* SART\*3750

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4710 Photography IV F,W (0-6) [0.50]**

A continuing investigation of colour photography and advance investigation into contemporary issues, with opportunities for interdisciplinary approaches to photographic practice.

*Prerequisite(s):* SART\*4700

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4800 Special Topics in Sculpture F,W (0-6) [0.50]**

An advanced course which focuses on a specific theme, subject, or technique in sculpture. Subject matter will vary according to the instructor or instructors and will consist of topics not otherwise available in the curriculum. Topics may include, for example, Kinetic Media, Public Art, Mold Making, or Figuration and Installation. Normally, two different topics will be offered each year (see SART\*4870).

*Prerequisite(s):* SART\*3300

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4810 Extended Media III W (0-6) [0.50]**

Advanced investigations into digital video/audio editing and interdisciplinary or alternative art practices.

*Prerequisite(s):* SART\*3770

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4820 Extended Media IV W (0-6) [0.50]**

Further investigations into digital video/audio editing and interdisciplinary or alternative art practices with emphasis on individual direction.

*Prerequisite(s):* SART\*4810

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4830 Interactive Multimedia W (0-6) [0.50]**

An in-depth study of two-dimensional interactive multimedia using professional authoring software. Students will design and create multimedia presentations which explore a contemporary issue in their art practice.

*Prerequisite(s):* SART\*3480

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

**SART\*4850 Specialized Studio Practice I F (0-6) [0.50]**

An advanced and specialized workshop in individually selected studio practices which affords opportunities for interdisciplinary approaches and oversees the development of independent study strategies. Students will research and complete a major self-directed project. Not intended for all Honours students. Recommended to assist in the preparation of application to graduate school.

*Prerequisite(s):* A minimum of 2 courses at the 4000-level in Studio Arts, a minimum cumulative average of at least 80% in Studio Arts (SART) courses and Art History (ARTH) courses.

*Restriction(s):* Permission of the Instructor or Director of the School.

**SART\*4860 Specialized Studio Practice II W (0-6) [0.50]**

Continuation of SART\*4850.

*Prerequisite(s):* A minimum of 2 courses at the 4000-level in Studio Arts, a minimum cumulative average of at least 80% in Studio Arts (SART) courses and Art History (ARTH) courses.

*Restriction(s):* Permission of the Instructor or Director of the School.

**SART\*4870 Special Topics in Sculpture F,W (0-6) [0.50]**

An advanced course which focuses on a specific theme, subject, or technique in sculpture. Subject matter will vary according to the instructor or instructors and will consist of topics not otherwise available in the curriculum. Topics may include, for example, Kinetic Media, Public Art, Mold Making, or Figuration and Installation. Normally, two different topics will be offered each year (see SART\*4800).

*Prerequisite(s):* SART\*3300

*Restriction(s):* Registration is limited to students registered in the Art History or Studio Art specializations of the Bachelor of Arts program with an average of 70% in all ARTH and SART course attempts.

## 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:*

THST*3110	[0.50]	Acting II
THST*3120	[0.50]	Acting III
THST*3410	[0.50]	Special Studies in Production I
THST*3420	[0.50]	Special Studies in Production II
THST*3600	[0.50]	Directed Readings and Special Independent Studies
THST*3620	[0.50]	Special Studies Seminar
THST*3630	[0.50]	Special Studies in Studio Practice
THST*4090	[0.50]	Directing
THST*4250	[0.50]	Honours Project in Theatrical Production
THST*4280	[1.50]	Ensemble Project
THST*4340	[0.50]	Playwriting
THST*4650	[0.50]	Honours Essay

*For times and dates of auditions and interviews, students should consult the School. All students applying for entry to these courses must obtain the signature of the Theatre Studies Program advisor or the Director, who will admit students only after consultation with the instructor.*

*The Theatre Studies program has a particular interest in the drama and theatre of Canada. Course offerings will reflect this concentration where appropriate.*

<b>THST*1040 Introduction to Theatre Studies F,W (3-0) [0.50]</b>
This course introduces students to the disciplines and subject areas that constitute Theatre Studies at the university level, including the work of playwrights, directors, designers, actors and technicians in creating productions, and the scholarly study of theatrical history, theory and dramatic literature. Attendance at a number of performances is required, since these performances are among the "texts" for the course. <i>Equate(s):</i> DRMA*1000 ,
<b>THST*1150 Seminar in Theatre Studies W (3-0) [0.50]</b>
A focused study of a selected topic in a small-group learning experience. Students will be introduced to research methodologies and offered opportunities to strengthen their writing and speaking skills. Variable course content. Consult the School's website for current topics. <i>Restriction(s):</i> Restricted to students who are declared majors in Theatre Studies.
<b>THST*1200 The Languages of Media F (3-2) [0.50]</b>
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.
<b>THST*2010 Theatre Historical Studies F (3-0) [0.50]</b>
This course will introduce students to the historical study of theatre by surveying developments in Western theatre from the classical period to twentieth-century modernism. Building on the historicity of Western theatre, the course also considers the historical conditions that have produced contemporary theatre practice in Canada. <i>Prerequisite(s):</i> THST*1040 <i>Equate(s):</i> DRMA*3180 <i>Restriction(s):</i> DRMA*2300
<b>THST*2080 Acting I F,W (2-3) [0.50]</b>
A studio course for drama students applying classroom theory to acting problems. The course is required of, but not restricted to, students in a drama specialization. <i>Prerequisite(s):</i> THST*1040 <i>Equate(s):</i> DRMA*2080
<b>THST*2120 Dramaturgy and Playwriting W (3-0) [0.50]</b>
Students will study how plays are made. The course includes analysis of theatrical texts and exercises in scripting. <i>Prerequisite(s):</i> THST*1040 <i>Equate(s):</i> DRMA*1050
<b>THST*2230 Intro to Technical Theatre F,W (2-3) [0.50]</b>
An introduction to the theory and practice of theatrical production, including sets, costumes, lighting, sound, props and technical drawing. Students are expected to serve on technical crews on some evenings and weekends during School productions. <i>Prerequisite(s):</i> DRMA*1000 or THST*1040 <i>Equate(s):</i> DRMA*2220

<b>THST*2240 Introduction to Theatre Design W (2-3) [0.50]</b>
Students will be introduced to theories, techniques and materials in five areas of theatrical design: sets, props, lighting, sound, and costume. The course also considers the history of design for the theatre, attending to the relationship between design and other forms of cultural expression. <i>Prerequisite(s):</i> DRMA*1000 or THST*1040
<b>THST*2450 Approaches to Media Studies W (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> THST*1200
<b>THST*2500 Contemporary Cinema W (2-3) [0.50]</b>
The course is designed to give the student knowledge and understanding of contemporary cinematic expression. <i>Equate(s):</i> DRMA*2500
<b>THST*2650 History of Communication F (3-0) [0.50]</b>
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. <i>Prerequisite(s):</i> THST*1200
<b>THST*3030 Theatre for Young Audiences U (2-2) [0.50]</b>
This is a studio course addressing selected topics dealing with theatrical practice for children and/or adolescents such as: creating theatre for young audiences; theatre as an instructional tool; teaching theatre to children; theatre games and play. <i>Prerequisite(s):</i> 10 credits <i>Equate(s):</i> DRMA*2400 <i>Restriction(s):</i> Students must be enrolled as a Major or Minor or area of concentration in Theatre Studies or B.A.Sc. Child, Youth and Family.
<b>THST*3080 Acting Studio F,W (2-3) [0.50]</b>
A studio course in acting that will address particular issues and techniques, and may conclude with a small-scale production. <i>Prerequisite(s):</i> THST*2080 <i>Equate(s):</i> DRMA*3080
<b>THST*3110 Acting II F,W (2-3) [0.50]</b>
A continuation of THST*2080. Students will perform in a public production. Admission is by audition only. <i>Prerequisite(s):</i> THST*2080 <i>Equate(s):</i> DRMA*3110 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3120 Acting III F,W (2-3) [0.50]</b>
A continuation of THST*3110. Students will perform in a public production. Admission is by audition only. <i>Prerequisite(s):</i> THST*3110 <i>Equate(s):</i> DRMA*3120 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3220 Technical Production I F,W (2-3) [0.50]</b>
This course offers students advanced engagement with the theory and application of theatrical crafts, and includes work in a technical capacity on a School production. <i>Prerequisite(s):</i> DRMA*2220 or THST*2230 <i>Equate(s):</i> DRMA*3220
<b>THST*3230 Technical Production II F,W (2-3) [0.50]</b>
A continuation of THST*3220, focusing on the theory and application of theatrical crafts, and including work in a technical capacity on a School production. Students will normally work in different capacities in THST*3220 and THST*3230. <i>Prerequisite(s):</i> THST*3220 <i>Equate(s):</i> DRMA*3230
<b>THST*3240 Theatrical Organization F (3-0) [0.50]</b>
A study of various models of theatrical organization such as theatrical funding, board and management structures, production management, technical direction, and stage management, together with their implications for theatrical production and interpretation. <i>Prerequisite(s):</i> THST*2010, THST*2080, THST*2120 <i>Equate(s):</i> DRMA*3240

<b>THST*3280 Theatrical Space W (3-0) [0.50]</b>
This course is a study of theatrical space as it shapes performance, reception, social value and cultural meanings. It explores the nature of performance spaces and the relationship between performer and audience, and considers theoretical approaches to the problem of theatrical space, including analyses of cultural location, aesthetic spatiality, public space and kinaesthetic space. The course offers an historical overview of various theatre and non-theatre venues for performance from the perspectives of actors, directors, designers, technicians and audiences. (Offered in odd-numbered years.) <i>Prerequisite(s):</i> THST*2240
<b>THST*3300 Sexuality and The Stage F (3-0) [0.50]</b>
This course focuses on issues relating to the staging of sexuality. The course will theorize and historicize the representation of sexual diversity. Variable content course. Topics may include, for example, the theatrical staging of gays, lesbians, bisexuals, and transgendered people; queer theatre; and the privileging of heterosexuality on the stage. (Offered in even-numbered years.) <i>Prerequisite(s):</i> (THST*2010 or THST*2120) or 1.50 credits in English <i>Equate(s):</i> DRMA*3300
<b>THST*3320 Applied Criticism of Drama and Theatre F (3-0) [0.50]</b>
This course is designed to engage students in critical practice as applied to theatrical production. <i>Prerequisite(s):</i> ( DRMA*1050 or THST*2120), (1 of THST*2080, THST*2010, THST*2300 ) <i>Equate(s):</i> DRMA*3320
<b>THST*3360 Political Intervention Theatre W (3-0) [0.50]</b>
This course examines major theories, practices and textualities of radical theatre interventions in politics in the twentieth- and twenty-first centuries. It traces the historical development and genealogies of interventionist processes, with particular attention to the transnational circulation of practices and methods. (Offered in even-numbered years.) (First offering is Winter 2008.) <i>Prerequisite(s):</i> (THST*2010, THST*2120) or 1.50 credits in English
<b>THST*3410 Special Studies in Production I F,W (2-3) [0.50]</b>
Students will serve in such capacities as stage managers, assistant stage managers, assistant directors, assistant designers, dramaturges, producers, or publicists on School productions, and will study the functions of these roles in theatrical production. Admission is by application to the School. <i>Prerequisite(s):</i> THST*3220, (1 of THST*2120, THST*3240, THST*3430, THST*3460, THST*3480, THST*3700) <i>Equate(s):</i> DRMA*3410 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3420 Special Studies in Production II F,W (2-3) [0.50]</b>
A continuation of THST*3410. Students will normally work in different capacities in THST*3410 and THST*3420. Admission is by application to the School. <i>Prerequisite(s):</i> THST*3410 <i>Equate(s):</i> DRMA*3420 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3430 Theatrical Design: Sets and Props F (2-3) [0.50]</b>
A study of the history, theory, and practice of theatrical design, with focus on the principles of set and prop design. <i>Prerequisite(s):</i> DRMA*2220 or (THST*2230, THST*2240 ) <i>Equate(s):</i> DRMA*3430
<b>THST*3460 Costume F (2-3) [0.50]</b>
This course studies the art of costume design for the theatre, placing the discipline in historical and theoretical contexts while exploring the practice and art of costume design. The course covers the techniques, materials and language necessary to the costume designer's craft and role in the production of a work of theatre. At the instructor's discretion, the course may include the design of mask, makeup, wigs and accessories. (Offered in odd-numbered years.) (First offering is Fall 2007.) <i>Prerequisite(s):</i> THST*2230, THST*2240 <i>Restriction(s):</i> DRMA*3440
<b>THST*3480 Lighting, Sound, Theatre Media W (2-3) [0.50]</b>
The course studies theatrical lighting, sound, and media from the perspective of the designer. Through a combination of class instruction, demonstration and practical lab projects, the student will follow the process for the design of light, sound and media (theory and practice), from the first reading of a script through all of the stages that lead to the creation of a design. Special attention is given to analyzing scripts for visual and aural images. (Offered in even-numbered years.) (First offering is Winter 2008.) <i>Prerequisite(s):</i> THST*2230, THST*2240 <i>Restriction(s):</i> DRMA*3440

<b>THST*3530 Canadian Film W (2-3) [0.50]</b>
This course is designed to give the student knowledge and understanding of Canadian film and film makers. <i>Prerequisite(s):</i> THST*1200 or DRMA*1500 <i>Equate(s):</i> DRMA*3530
<b>THST*3540 World Theatre Cultures U (3-0) [0.50]</b>
This course presents a focused study of theatrical traditions and dramatic practices (largely) outside European traditions. Variable content course. Consult the School's website for current topics. <i>Prerequisite(s):</i> (THST*2010, THST*2120) or 1.50 credits in English
<b>THST*3550 Theories of Drama and Theatre W (3-0) [0.50]</b>
A study of selected theoretical approaches to the study of drama and theatre. <i>Prerequisite(s):</i> (THST*2010 or DRMA*2300 ), THST*2120 <i>Equate(s):</i> DRMA*3550
<b>THST*3600 Directed Readings and Special Independent Studies U (3-0) [0.50]</b>
Independent study 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. Special studies may also be arranged in the practical aspects of the theatre, with appropriate assignments, not leading to a production. 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. <i>Prerequisite(s):</i> 3.00 credits in Theatre Studies including ( DRMA*1050 or THST*2120), ( DRMA*2300 or THST*2010) <i>Equate(s):</i> DRMA*3600 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3620 Special Studies Seminar F (3-0) [0.50]</b>
A seminar course that provides for intensive study of a specific aspect of drama and/or theatre. <i>Prerequisite(s):</i> 3.00 credits in Theatre Studies. <i>Equate(s):</i> DRMA*3620 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3630 Special Studies in Studio Practice U (3-0) [0.50]</b>
The course provides an intensive exploration of one aspect of studio practice: playwriting, acting, design or technical theatre. <i>Prerequisite(s):</i> 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. <i>Equate(s):</i> DRMA*3630 <i>Restriction(s):</i> Instructor consent required.
<b>THST*3650 Theatre Historical Studies Seminar F (3-0) [0.50]</b>
This seminar course investigates a topic in theatre history. The course will further develop students' research skills and expertise in writing and speaking about scholarly materials in the discipline. Variable content course. Consult the School's website for current topics. <i>Prerequisite(s):</i> (THST*2010, THST*2120) or DRMA*2300 <i>Equate(s):</i> DRMA*4300
<b>THST*3660 Dramatic Literature and Theory Seminar W (3-0) [0.50]</b>
This seminar course investigates an area of dramatic literature. The course will develop students' research skills and writing and speaking about scholarly materials in the discipline. Variable course content. Consult the School's website for current topics. <i>Prerequisite(s):</i> (THST*2010, THST*2120) or DRMA*2300
<b>THST*3700 Fundamentals of Directing F (2-3) [0.50]</b>
A study of the basic theories of directing, complemented by practical in-class directing exercises. <i>Prerequisite(s):</i> ( DRMA*1050 or THST*2120), THST*2080, THST*2240 <i>Equate(s):</i> DRMA*3700
<b>THST*3850 Canadian Drama and Theatre F (3-0) [0.50]</b>
A study of Canadian plays in their historical, cultural, and theatrical contexts. <i>Prerequisite(s):</i> DRMA*2300 or any 2000 level literature course <i>Equate(s):</i> DRMA*3850 <i>Restriction(s):</i> DRMA*3331/2

**THST\*3950 Drama in London W (2-4) [0.50]**

A course 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.

**THST\*4050 Voice and Movement F (2-3) [0.50]**

This acting course engages students in an integrated approach to the art of vocal and physical presence, with a particular focus on voice and whole body gesture as means of self-expression in performance. (Offered in even-numbered years.)

*Prerequisite(s):* THST\*2010, THST\*2120, THST\*3080

*Equate(s):* DRMA\*4050

**THST\*4090 Directing F,W (3-2) [0.50]**

The application of the fundamentals of directing through a specific directorial assignment. Admission is by application to the School.

*Prerequisite(s):* THST\*3700

*Equate(s):* DRMA\*4090

*Restriction(s):* Instructor consent required.

**THST\*4250 Honours Project in Theatrical Production F,W (0-6) [0.50]**

The completion, under direction, of a project in acting, directing, dramaturgy, design or technical theatre.

*Prerequisite(s):* THST\*2010, THST\*2120, (1 of THST\*3110, THST\*3220, THST\*3430, DRMA\*3440, THST\*3480, THST\*3700). Admission is by application to the School; see the Policy on the course posted on the School's website.

*Equate(s):* DRMA\*4250

*Restriction(s):* Consent of both the instructor and the School are required.

**THST\*4280 Ensemble Project W (6-9) [1.50]**

Students will engage throughout the semester with the processes of forming a theatre company, theorizing its organizational structure, and the particular project being undertaken, exploring fundraising and publicity exercises, casting, designing, dramaturging, directing, and mounting a production, and engaging in post-production analysis that assesses the social and theatrical impact of the decisions taken and procedures employed.

*Prerequisite(s):* ( DRMA\*1000 or THST\*1040), THST\*2080, [ DRMA\*2220 or (THST\*2230, THST\*2240)], THST\*3550, THST\*3850, (THST\*3650 or THST\*3660)

*Equate(s):* DRMA\*4280

*Restriction(s):* Restricted to majors in the Theatre Studies Program who have completed a minimum of 14.00 credits.

**THST\*4320 Seminar in Dramatic Literature and Theory F (3-0) [0.50]**

An in depth study of one aspect of dramatic literature before 1900.

*Prerequisite(s):* (THST\*3650 or THST\*3660), THST\*3850

*Equate(s):* DRMA\*4320

**THST\*4330 Seminar in Canadian Drama and Theatre W (3-0) [0.50]**

An in depth study of one aspect of Canadian drama and theatre.

*Prerequisite(s):* (THST\*3650 or THST\*3660), THST\*3550, THST\*3850

*Equate(s):* DRMA\*4330

**THST\*4340 Playwriting F (3-0) [0.50]**

A study of the theory and practice of playwriting. Admission is by application to the instructor.

*Prerequisite(s):* (THST\*3650 or THST\*3660), THST\*3850

*Equate(s):* DRMA\*4340

*Restriction(s):* Instructor consent required.

**THST\*4650 Honours Essay U (3-0) [0.50]**

The completion, under direction, of a scholarly essay in the study of drama and/or theatre. Admission is by application to the instructor.

*Prerequisite(s):* (THST\*3650 or THST\*3660), THST\*3550, THST\*3850

*Equate(s):* DRMA\*4650

*Restriction(s):* Instructor consent required.

## Toxicology

*Department of Biomedical Sciences*

*Department of Chemistry*

*Department of Environmental Biology*

*Department of Mathematics and Statistics*

*Department of Molecular and Cellular Biology*

*Department of Pathobiology*

### **TOX\*2000 Principles of Toxicology F (3-0) [0.50]**

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. Department of Biomedical Sciences.

*Prerequisite(s):* (CHEM\*1050 or CHEM\*2300), (MATH\*1080 or equivalent),  
(BIOL\*1040 or equivalent) (CHEM\*2300 may be taken concurrently)

### **TOX\*3300 Analytical Toxicology F (3-3) [0.50]**

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. Department of Chemistry.

*Prerequisite(s):* CHEM\*2480, BIOC\*2580, TOX\*2000 (TOX\*2000 may be taken concurrently)

*Restriction(s):* CHEM\*3430, CHEM\*3450 Priority Access course. Enrolment may be restricted to particular programs or specializations. See department for more information.

### **TOX\*3360 Environmental Chemistry and Toxicology S,W (3-0) [0.50]**

The chemistry of the natural environment; the influence of pollutants upon the environment, including methods of introduction of pollutants to, and removal of pollutants from, the environment. Department of Chemistry and Biochemistry. (Also listed as CHEM\*3360.)

*Prerequisite(s):* CHEM\*1050

*Equate(s):* CHEM\*3360

*Restriction(s):* CHEM\*1310

### **TOX\*4000 Medical Toxicology F (3-3) [0.50]**

The toxicology of mammalian body systems: dose-response, mechanisms and systemic sites of action of major groups of chemical toxicants. The course is designed for students majoring in biomedical toxicology. Department of Biomedical Sciences.

*Prerequisite(s):* BIOM\*3090, TOX\*3300

### **TOX\*4100 Toxicological Pathology W (2-2) [0.50]**

Evaluation of the pathologic responses of cells and tissues to toxic compounds. The course is designed for students majoring in toxicology. Department of Pathobiology.

*Prerequisite(s):* PATH\*3610 (or equivalent)

### **TOX\*4200 Topics in Toxicology W (0-4) [0.50]**

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.

*Prerequisite(s):* TOX\*2000, TOX\*3300

*Restriction(s):* Registration in B.Sc. Honours Toxicology students in their 7th or 8th semester. Departments of Biomedical Sciences and Environmental Biology.

### **TOX\*4550 Ecotoxicological Risk Characterization W (3-0) [0.50]**

A biologically based, advanced course that will give students working knowledge of current processes and techniques for ecotoxicological risk characterization. The course material will cover the topics of problem definition, dose response characterization, exposure characterization, risk assessment, and risk management decision making. (Also listed as ENVB\*4550.)

*Prerequisite(s):* TOX\*2000, ENVB\*3030

*Equate(s):* ENVB\*4550

### **TOX\*4590 Biochemical Toxicology F (3-0) [0.50]**

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. Designed for students specializing in Toxicology or Biochemistry. Department of Chemistry.

*Prerequisite(s):* (1 of CHEM\*3430, CHEM\*3450, TOX\*3300), BIOC\*3560, MBG\*2020

## Veterinary Medicine

*Department of Biomedical Sciences*

*Department of Clinical Studies*

*Department of Pathobiology*

*Department of Population Medicine*

**Students entering the D.V.M. Program prior to Fall 2000 should refer to the undergraduate calendar for their year of program entry for appropriate course listings.**

*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.**

### **VETM\*3000 Veterinary Biochemistry P1 (2-1) [0.50]**

This course integrates the biochemistry of the healthy animal with a study of some abnormalities in metabolic pathways. The emphasis is on understanding the physiological and biochemical mechanisms and regulatory processes within cells, tissues and organs, as a basis for later courses on diseases. Department of Biomedical Sciences.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3070 Veterinary Anatomy P1 (2-6) [2.00]**

An introduction to comparative, topographical anatomy, primarily of 4 domestic mammals: cat, dog, horse and cow. Full dissections of these species are related to the living animal and to imaging, to form the basis for future studies in clinical morphology. Students are first introduced to the major anatomical systems and then to the regions in detail: thorax, abdomen, pelvis and perineum, limbs, and head and neck. Active learning, problem solving, communication skills and the integration of material across concurrent courses are fostered. Department of Biomedical Sciences.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3080 Veterinary Physiology P1 (3-3) [1.50]**

The course describes the physiological processes carried out by the major tissues and organ systems, and the regulatory mechanisms that affect tissue and organ function. Topics dealt with in the course include the following: the cellular and chemical constituents of blood, blood coagulation and haemostasis, the function of the immune system, resistance to infectious agents and the principles of immunoprophylaxis, cardiac function, cardiovascular haemodynamics, blood pressure, peripheral and regional circulation of blood, the lymph circulation, the structure and function of the mammalian nervous system and organs associated with special senses, the functions of the digestive tract, lungs and kidney thermoregulation and water, electrolyte and acid-base balance. The homeostatic features and species variation of the tissue organ systems will be emphasized. Departments of Biomedical Sciences and Pathobiology.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3120 Veterinary Histology P1 (3-3) [0.75]**

A lecture and laboratory course emphasizing the microscopic organization of the tissues and organs of domestic animals in various physiological states. Correlations between morphology and function of various cells and tissues comprising the organ systems will be discussed. Department of Biomedical Sciences.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3210 Art of Veterinary Medicine I P1 (V-V) [0.50]**

In a series of integrated modules, this course will assist students in increasing their self-awareness and comprehension of a range of legal, professional and ethical values and behaviours that are essential and normal components of veterinary medicine. Emphasis will be placed on understanding, evaluating and improving interpersonal relations and oral and written communication skills. The ethical principles that underlie veterinary medicine will be explored in depth. The course will also assist students in understanding their position in the developing history of veterinary medicine and inform them of emerging trends. Issues related to professional development, how other species interact with humans, and the client/patient/veterinarian triad will be introduced. The application of these learned skills in the resolution of problems will be introduced. OVC Dean's Office, Department of Population Medicine and the Veterinary Teaching Hospital.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3220 Art of Veterinary Medicine II P2 (2-0) [0.50]**

Using modules, this course will build on, and enhance, the knowledge base and skill set acquired in Phase I in the area of communications, human-animal interactions, professional development, and the client/patient/veterinarian triad. The focus in these areas will now move towards recognising difficulties that may arise and how to differentiate abnormal situations from normal ones. Problem-solving, conflict resolution and stress management through application of innate and acquired knowledge and skills will be developed. In addition, the course will introduce concepts of business and entrepreneurial skills which are required for successful veterinary practice. OVC Dean's Office, Department of Population Medicine and the Veterinary Teaching Hospital.

*Prerequisite(s):* VETM\*3210

*Co-requisite(s):* All Phase 2 courses.

### **VETM\*3390 Veterinary Medical Genetics P1 (1-1) [0.50]**

The course deals with the genetic basis of disease and birth defects in general and the salient features and inheritance patterns of the common birth defects, metabolic errors and reproductive problems in domestic animals. Department of Biomedical Sciences.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3400 Health Management I P1 (3-1) [0.75]**

The course is the first of two comprehensive and integrated courses that will span the first two phases of the DVM program. Both courses are intended to establish the foundation for, and contribute to the students' achievement of selected DVM 2000 elements of competency in the context of the principles of health management. The primary emphasis of this component is to establish the historical perspective and basic tools required for health promotion and disease prevention. Department of Population Medicine.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3410 Health Management II P2 (3-0) [0.75]**

This course is a continuation of the Phase 1 course Health Management I. Previously presented concepts will be explored in greater depth and complexity. Additional emphasis will be placed on relevant epidemiological tools for monitoring, outbreak investigation, critical appraisal and the applications of principles from the previous course in the series to measure performance, including relevant production genetics, and animal behaviour in a species/industry context. Department of Population Medicine.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

### **VETM\*3430 Clinical Medicine I P1 (V-V) [0.25]**

The course will contribute to students' achievement of selected DVM 2000 elements of competency in the areas of animal handling and the clinical examination of various species. Students will become familiar with the expected variation in common clinical parameters and how this variation is impacted by aging, changes in health status, and external environmental influences and other sources of stress. Students will be introduced to clinical problem solving using case material from the Veterinary Teaching Hospital. They will develop their verbal and written communication skills through case simulations and analyses. The course will be presented using lectures, laboratory classes and independent study. The graduating competencies can be found on the OVC website (<http://www.ovcnet.uoguelph.ca/homepage/html>). Department of Clinical Studies.

*Co-requisite(s):* All Phase 1 courses.

### **VETM\*3440 Clinical Medicine II P2 (0-2) [0.50]**

The course is a continuation of Clinical Medicine I. It will contribute to students' achievement of selected elements of graduating competency in the areas of clinical examination of specific organ systems of various species. Students will enhance and refine their clinical problem solving skills using case material from the Veterinary Teaching Hospital. They will continue to develop their verbal and written communication skills through case simulations and analyses. The course will be presented using lectures, laboratory classes and independent study. The graduating competencies can be found on the OVC website (<http://www.ovcnet.uoguelph.ca/homepage/html>). Department of Clinical Studies.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

### **VETM\*3450 Principles of Disease in Veterinary Medicine P2 (V-V) [2.75]**

This course addresses several major topics, including principles of disease induction and transmission, host response to threat and injury, pathogenetic mechanisms of infectious and toxic agents, and manipulation of disturbances in health. The interaction among host, environmental, and etiologic factors in the development of disease will be highlighted. Students will learn to recognize, describe, and evaluate disturbances of health and homeostasis at the level of the population, individual animal, organ system, tissue and cell using a variety of diagnostic modalities. Departments of Biomedical Sciences and Pathobiology.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

**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. Departments of Biomedical Sciences, Pathobiology and Population Medicine.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

**VETM\*3470 Anaesthesiology 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. Departments of Biomedical Sciences and Clinical Studies.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

**VETM\*3480 Phase 2: Special Topics P2 (V-V) [0.50]**

This course provides opportunities for students to enrich their educational experience, in depth and/or in breadth, beyond the core competency requirements of DVM 2000. This course is constructed of a series of topic-based modules related to the core teaching in Phase 2. Students will be required to take at least two of these modules. Departments of Biomedical Sciences, Clinical Studies, Pathobiology and Population Medicine.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

**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. Department of Clinical Studies.

*Prerequisite(s):* All Phase 1 courses.

*Co-requisite(s):* All Phase 2 courses.

**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. OVC Dean's Office, Department of Population Medicine, Veterinary Teaching Hospital.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**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. Department of Clinical Studies.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**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>). Departments of Clinical Studies and Population Medicine.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**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>). Department of Clinical Studies.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**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>). Department of Pathobiology.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**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 pathobiology 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>). Department of Pathobiology.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**VETM\*4520 Surgical Exercises P3 (V-V) [2.00]**

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. Department of Clinical Studies.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**VETM\*4530 Advanced Health Management Modules 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>). Department of Population Medicine.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**VETM\*4610 Small Animal Clinics - Small Animal Stream P4 (V-V) [3.25]**

This course is for students who have selected the Small Animal Stream in Phase 4 or DVM Program. The goal of the small animal clinics course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will rotate through various service areas, and actively participate in the diagnosis and treatment of client-owned animals in the teaching hospital. Regularly scheduled small group discussions allow the exploration of issues during diagnosis and management of the individual cases.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4620, VETM\*4880, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4620 Health Management - Small Animal Stream P4 (V-V) [1.00]**

This course is for students who have selected the Small Animal Stream in Phase 4 or DVM Program. The goal of the health management course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will participate in a series of rotations that emphasize the implementation of veterinary directed management programs, which affect the health of animals and ultimately humans.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4610, VETM\*4880, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4660 Small Animal Clinics - Mixed Stream P4 (V-V) [2.00]**

This course is for students who have selected the Mixed Stream in Phase 4 or DVM Program. The goal of the small animal clinics course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will rotate through various service areas, and actively participate in the diagnosis and treatment of client-owned animals in the teaching hospital. Regularly scheduled small group discussions allow the exploration of issues during diagnosis and management of the individual cases.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4670, VETM\*4680, VETM\*4890, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4670 Large Animal Clinics - Mixed Stream P4 (V-V) [1.50]**

This course is for students who have selected the Mixed Stream in Phase 4 or DVM Program. The goal of the large animal clinics course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will rotate through various service areas, and actively participate in the diagnosis and treatment of client-owned animals in the teaching hospital. Regularly scheduled small group discussions allow the exploration of issues during diagnosis and management of the individual cases.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4660, VETM\*4680, VETM\*4890, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4680 Health Management - Mixed Stream P4 (V-V) [2.00]**

This course is for students who have selected the Mixed Stream in Phase 4 of the DVM Program. The goal of the health management course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will participate in a series of rotations that emphasize the implementation of veterinary directed management programs, which affect the health of animals and ultimately humans.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4660, VETM\*4670, VETM\*4890, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4710 Large Animal Clinics - Food Animal Stream P4 (V-V) [1.00]**

This course is for students who have selected the Food Animal Stream in Phase 4 or DVM Program. The goal of the large animal clinics course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will rotate through various service areas, and actively participate in the diagnosis and treatment of client-owned animals in the teaching hospital. Regularly scheduled small group discussions allow the exploration of issues during diagnosis and management of the individual cases.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4720, VETM\*4880, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4720 Health Management - Food Animal Stream P4 (V-V) [3.25]**

This course is for students who have selected the Food Animal Stream in Phase 4 of the DVM Program. The goal of the health management course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will participate in a series of rotations that emphasize the implementation of veterinary directed management programs, which affect the health of animals and ultimately humans.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4710, VETM\*4880, VETM\*4900

*Restriction(s):* Registration in the DVM program.

**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. Department of Clinical Studies.

*Prerequisite(s):* All Phase 2 courses.

*Co-requisite(s):* All Phase 3 courses.

**VETM\*4880 Electives in Veterinary Medicine I P4 (V-V) [3.25]**

This course is for students who have selected the Small Animal or Food Animal Stream in Phase 4 of the DVM Program. The goal of this course is to provide students the opportunity to pursue greater breadth and depth in their program according to their interests. The course is largely experiential in structure and process. Students will select a series of approved internal and external rotations that will allow them to pursue areas of interest in veterinary medicine.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* (VETM\*4610 or VETM\*4710), (VETM\*4620 or VETM\*4720), VETM\*4900

*Restriction(s):* Registration in the DVM program.

**VETM\*4890 Electives in Veterinary Medicine II P4 (V-V) [2.00]**

This course is for students who have selected the Mixed or Equine Stream in Phase 4 of the DVM Program. The goal of this course is to provide students the opportunity to pursue greater breadth and depth in their program according to their interests. The course is largely experiential in structure and process. Students will select a series of approved internal and external rotations that will allow them to pursue areas of interest in veterinary medicine.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* (VETM\*4660 or VETM\*4920), (VETM\*4670 or VETM\*4930), (VETM\*4680 or VETM\*4940) VETM\*4900

*Restriction(s):* Registration in the DVM program.

**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 using resources available through the Department of Clinical Studies. The externship must be in approved private, primary care, veterinary practice (preferably in Ontario) that involves both food animal and companion animal species. 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. During the externship, students will receive formative evaluations of their performance relative to diagnostic skills, delivery of veterinary care, technical skills and professional conduct. At the end of the externship, students will also receive a summative evaluation in each of these areas. In addition to keeping a daily log of cases attended, students will also be required to write one case report. Normally, this will be based on a case attended during the externship and the manuscript will be written in the format of a "Brief Communication" following the format required by the Canadian Veterinary Journal. The evaluation outcome of this course is outstanding, pass or fail. Coordinated by the Department of Clinical Studies.

*Prerequisite(s):* All Phase 1, Phase 2 and Phase 3 courses.

**VETM\*4920 Small Animal Clinics - Equine Stream P4 (V-V) [1.50]**

This course is for students who have selected the Equine Stream in Phase 4 or DVM Program. The goal of the small animal clinics course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will rotate through various service areas, and actively participate in the diagnosis and treatment of client-owned animals in the teaching hospital. Regularly scheduled small group discussions allow the exploration of issues during diagnosis and management of the individual cases.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4890, VETM\*4900, VETM\*4930, VETM\*4940

*Restriction(s):* Registration in the DVM program.

**VETM\*4930 Large Animal Clinics - Equine Stream P4 (V-V) [2.50]**

This course is for students who have selected the Equine Stream in Phase 4 or DVM Program. The goal of the large animal clinics course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will rotate through various service areas, and actively participate in the diagnosis and treatment of client-owned animals in the teaching hospital. Regularly scheduled small group discussions allow the exploration of issues during diagnosis and management of the individual cases.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4890, VETM\*4900, VETM\*4920, VETM\*4940

*Restriction(s):* Registration in the DVM program.

**VETM\*4940 Health Management - Equine Stream P4 (V-V) [1.50]**

This course is for students who have selected the Equine Stream in Phase 4 of the DVM Program. The goal of the health management course is to assist in the role transformation from veterinary student to veterinary practitioner. The course is largely experiential in structure and process. Small groups of students will participate in a series of rotations that emphasize the implementation of veterinary directed management programs, which affect the health of animals and ultimately humans.

*Prerequisite(s):* All Phase 3 courses.

*Co-requisite(s):* VETM\*4670, VETM\*4890, VETM\*4900, VETM\*4920

*Restriction(s):* Registration in the DVM program.

## Women's Studies

### College of Arts

#### WMST\*1000 Introduction to Women's Studies F (3-0) [0.50]

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.

*Equate(s):* ISS\*2200 , WMST\*2200

#### WMST\*2000 Women and Representation W (3-0) [0.50]

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.

#### WMST\*3000 Feminist Theory and Methods F (3-0) [0.50]

A comparative and critical examination of feminist theories and their methodological implications, including contributions of and tensions between various feminisms. Special attention to contemporary developments in the field.

*Prerequisite(s):* 10.00 credits including (1 of ISS\*2200 , WMST\*1000, WMST\*2200 ), (0.50 additional credits from Women's Studies List A), (1 of ARTH\*2480, DRMA\*2300 , ENGL\*2120, PHIL\*2060, POLS\*2000, SOAN\*2400)

#### WMST\*3010 Gender and Diversity W (3-0) [0.50]

An examination of studies of the interaction of gender with race, class, ethnicity, sexual orientation, ability/disability, and other axes of difference as they position women within systems of power. Students will compare and assess contemporary theories, approaches, and research that address together gender and diversity issues and problems.

*Prerequisite(s):* 10.00 credits including WMST\*1000, WMST\*2000, 0.50 additional credits from Women's Studies List A

#### WMST\*3510 Directed Readings in Women's Studies S,F,W (3-0) [0.50]

An opportunity for advanced Women's Studies undergraduates to pursue an independent course of readings and assignments in Women's Studies. The student will design a course of readings and assignments with the instructor and submit the proposal to the Coordinator of Women's Studies for approval by the last day of the Add Period of that semester.

*Prerequisite(s):* 10.00 credits including (1 of ISS\*2200 , WMST\*1000, WMST\*2200 ), 1.00 additional credits from Women's Studies List A

*Restriction(s):* Instructor consent required.

#### WMST\*3520 Independent Workplace Learning in Women's Studies S,F,W (3-0) [0.50]

An opportunity for advanced Women's Studies undergraduates to combine workplace experience (in women-focused agencies or organizations) with Women's Studies research and assignments relevant to that work. The student will design a project with the instructor and submit a proposal to the Coordinator of Women's Studies for approval by the last day of the Add Period of that semester.

*Prerequisite(s):* 10.00 credits including (1 of ISS\*2200 , WMST\*1000, WMST\*2200 ), 1.00 additional credits from Women's Studies List A

*Restriction(s):* Instructor consent required.

#### WMST\*4010 Seminar in Women's Studies W (3-0) [0.50]

The framework of the course will be provided by a series of unresolved issues or challenging questions regarding women which will call upon the students' critical, evaluative, and integrative abilities. The content will largely depend upon the students' backgrounds within the program and their other major areas of study.

*Prerequisite(s):* (1 of ISS\*2200 , WMST\*1000, WMST\*2200 ), 1.00 additional credits from Women's Studies List A

*Equate(s):* ISS\*4010

#### WMST\*4510 Advanced Topics in Women's Studies S,F,W (3-0) [0.50]

An opportunity for advanced Women's Studies undergraduates to pursue an advanced research project in Women's Studies. The student will design a project with the instructor and submit for approval to the Coordinator of Women's Studies by the last day of the Add Period in that semester.

*Prerequisite(s):* 15.00 credits including (1 of ISS\*2200 , WMST\*1000, WMST\*2200 ), 1.00 additional credits from Women's Studies List A

*Restriction(s):* Instructor consent required.

#### WMST\*4520 Advanced Topics in Women's Studies S,F,W (3-0) [0.50]

An opportunity for advanced Women's Studies undergraduates to pursue an advanced research project in Women's Studies. The student will design a project with the instructor and submit for approval to the Coordinator of Women's Studies by the last day of the Add Period in that semester.

*Prerequisite(s):* 15.00 credits including (1 of ISS\*2200 , WMST\*1000, WMST\*2200 ), 1.00 additional credits from Women's Studies List A

*Restriction(s):* Instructor consent required.

## Zoology

### Department of Integrative Biology

#### **ZOO\*1500 Humans in the Natural World - a Zoological Perspective S,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. (Also offered through distance education format.)

*Restriction(s):* This course is designed for non-science students. B.Sc. students cannot take this course for credit.

#### **ZOO\*2050 Natural History of Ontario S,F,W (0-0) [0.50]**

This course provides an introduction to the natural history of Ontario. The course begins with a review of geological, ecological and evolutionary factors that have influenced species diversity in the province. Distributions and abundances of biota, primarily animals, are discussed within the context of the four major ecozones. Human impacts on the biotic diversity of Ontario are examined and the conservation of habitats and species is discussed. Students are required to do three reports, one of which involves field work. (Offered through distance education format only.)

*Prerequisite(s):* BIOL\*1040 or equivalent

#### **ZOO\*2070 Invertebrate Zoology I F (2-3) [0.50]**

To provide a general knowledge of the biology, functional morphology and ecology of the invertebrates from protists to molluscs.

*Prerequisite(s):* BIOL\*1040

#### **ZOO\*2080 Invertebrate Zoology II W (2-3) [0.50]**

To provide a general knowledge of the biology, functional morphology and ecology of the invertebrates from annelids to the urochordates.

*Prerequisite(s):* ZOO\*2070

#### **ZOO\*2090 Vertebrate Structure and Function F,W (2-3) [0.50]**

A comparative survey of the structure and functioning of the chordates with emphasis on the vertebrates. Course includes laboratory study of the anatomy of selected vertebrates.

*Prerequisite(s):* BIOL\*1040

#### **ZOO\*2100 Developmental Biology F,W (3-3) [0.50]**

An introduction to animal development through the study of reproduction, early embryology, histogenesis, organogenesis, and morphogenesis. The roles of determination, differentiation, growth, morphogenesis, and pattern formation will be emphasized.

*Prerequisite(s):* BIOL\*1040

#### **ZOO\*3000 Comparative Histology F (2-3) [0.50]**

An introduction to the microscopic structure of the major organ systems of the vertebrate body. The study of epithelial, connective, muscular, and nervous tissues precedes examination of the comparative histology of the circulatory, nervous, digestive, integumentary, respiratory, excretory, reproductive, endocrine, and sensory systems of vertebrates.

*Prerequisite(s):* 1 of BIOM\*3010, BIOM\*3100, HK\*3940, HK\*3401/2, ZOO\*2090, ZOO\*3200

#### **ZOO\*3010 Wild Life Parasitology F (2-3) [0.50]**

To provide an introduction to parasitology citing examples from the protozoans, helminths, and arthropods with particular reference to those in wild life, including fishes.

*Prerequisite(s):* ZOO\*2070

#### **ZOO\*3200 Comparative Animal Physiology I F (3-3) [0.50]**

The course will examine the underlying molecular and cellular events which mediate physiological processes and contribute to whole animal homeostasis. Particular emphasis will be placed on comparing the strategies and adaptations used by different animals and the influence of varying environmental conditions. The course will focus on the nervous, muscular, respiratory and circulatory systems. This course involves exercises that use animals. BIOM\*3100, BIOM\*3110 and HK\*3940 are available to cover similar material without labs.

*Prerequisite(s):* BIOC\*2580

#### **ZOO\*3210 Comparative Animal Physiology II W (3-3) [0.50]**

This is the second course that provides an introduction to the physiological mechanisms used by vertebrates and invertebrates. The course will examine the underlying molecular and cellular events which mediate physiological processes and contribute to whole animal homeostasis. Particular emphasis will be placed on comparing the strategies and adaptations used by different animals and the influence of varying environmental conditions. The course will include an examination of digestive physiology, excretion, endocrinology and osmoregulation. This course involves exercises that use animals. BIOM\*3100, BIOM\*3110 and HK\*3940 are available to cover similar material without labs.

*Prerequisite(s):* BIOC\*2580

#### **ZOO\*3300 Evolution F,W (3-0) [0.50]**

A comprehensive introduction to evolutionary biology, the historical development of the discipline, the extent and nature of genetic diversity, and the mechanisms of evolutionary change. Examination of adaptation and speciation, and the origins and patterns of biotic diversity through evolutionary time. Designed to integrate evolutionary theory with other fields of biology such as development, ecology and systematics.

*Prerequisite(s):* MBG\*2000, (BIOL\*2060 or BIOL\*3110, which may be taken concurrently)

#### **ZOO\*4020 Ichthyology F (2-3) [0.50]**

An introduction to the interrelationship of fossil and living taxa, and the fishes of the world with a special emphasis on the main Canadian and commercial forms, including detailed phyletic classification and evolution of fish-like vertebrates, their anatomical, morphological and selected ecological features.

*Prerequisite(s):* BIOL\*3450, ZOO\*2090

#### **ZOO\*4050 Natural Resources Policy W (3-0) [0.50]**

An analysis of how political, economic, social and scientific factors interact to determine the policy underlying management of renewable and non-renewable natural resources provincially, nationally and internationally. The course will analyze current policies pertaining to fisheries, wild life, forestry, energy, water, minerals, international treaties and accords.

*Prerequisite(s):* 15.00 credits

*Restriction(s):* Registration in semester 7 or 8.

#### **ZOO\*4070 Animal Behaviour F (3-0) [0.50]**

An introduction to the theories and principles of the behaviour of animals. The course will be a comparative study of learning, socialization, social interaction, and other components of animal behaviour.

*Prerequisite(s):* 1 of PSYC\*2410, PSYC\*3410, ZOO\*3200

#### **ZOO\*4090 Ornithology F (2-3) [0.50]**

An introduction to the biology of birds. Structure and function will be discussed in relation to various aspects of avian biology including evolution, flight, migration, reproduction, behaviour, and distribution.

*Prerequisite(s):* ZOO\*2090

#### **ZOO\*4110 Principles of Fish and Wild Life Management F (3-0) [0.50]**

Presents ecological aspects of managing populations of fish, birds and mammals, evaluates techniques and rationale for current fisheries and wild life programs. The course is not available to students in the Wild Life or Marine and Freshwater Biology majors.

*Restriction(s):* BIOL\*4150, ZOO\*4570

#### **ZOO\*4170 Experimental Comparative Animal Physiology W (2-3) [0.50]**

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\*3110, HK\*3940, ZOO\*3210

#### **ZOO\*4280 Mammalogy W (2-3) [0.50]**

An introduction to the orders of mammals on a world-wide basis, with detailed examination of Canadian species.

*Prerequisite(s):* ZOO\*2090

**ZOO\*4300 Marine Biology and Oceanography F (3-3) [0.75]**

An intensive two-week course 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\*2080

**ZOO\*4330 Environmental Biology of Fishes W (2-3) [0.50]**

A comparative examination of selected freshwater and marine fishes to illustrate the significance of environmental influences on life styles, behavioral patterns, physiological responses, population biology and community structure. The use of niche, habitat and ecotopie concepts in defining the role of fishes in representative types of aquatic ecosystems. It is recommended that students take ZOO\*4020 before taking ZOO\*4330, even though ZOO\*4020 is not required as a prerequisite.

**ZOO\*4350 Biology of Polluted Waters F (2-3) [0.50]**

A practical course in biology of disturbed waters, and toxicity of pollutants to aquatic life. Designed to familiarize students with the characteristics of polluted ecosystems, best methods of field survey, and procedures for toxicity tests.

*Prerequisite(s):* BIOL\*3450

**ZOO\*4410 Field Ecology F (3-3) [0.75]**

A 12-day field course held in Algonquin Park, Ontario, during August. Students independently conduct and write reports about 2 research projects of their 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 charge by the field station for room and board will be passed on to the student. Students are also responsible for their own transportation to and from the field station. A departmental application form must be submitted for approval at least 4 weeks prior to the last day of course selection for the Summer semester, and the signature of the course coordinator will be 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):* 0.50 credits in ecology

*Restriction(s):* Instructor consent required.

**ZOO\*4430 Herpetology F (2-3) [0.50]**

This course will serve as an introduction to the biology of amphibians and reptilians on a world-wide basis with emphasis on the evolutionary significance of these groups.

*Prerequisite(s):* ZOO\*2090

**ZOO\*4470 Comparative Endocrinology F (3-0) [0.50]**

A study of the structure, function and evolution of endocrine glands and hormones, and the role of endocrines in integrating physiological functions in animals. The course is designed to familiarize biology students with current endocrine investigational methodology. (Offered in odd-numbered years.)

*Prerequisite(s):* 1 of BIOM\*3110, HK\*3940, ZOO\*3210

**ZOO\*4540 Marine and Freshwater Research F,W (0-6) [0.50]**

In this course, students will design, execute and communicate the results of a research project involving aquatic organisms. This will involve an examination of the primary scientific literature, the formulation of hypotheses, the design of experiments, the development of analytical skills and familiarity with the operation of analytical equipment and data analysis. Faculty guidance will be provided.

*Prerequisite(s):* BIOL\*3450, BIOC\*2580, PHYS\*1080, STAT\*2040

*Restriction(s):* Registration in semester 7 or 8 of the Marine and Freshwater Biology Major of the B.Sc. Program.

**ZOO\*4570 Marine Ecological Processes F (3-1) [0.50]**

Advanced consideration of physical and biogeochemical processes in the world's oceans. Examination of the critical dependence of biological processes on physical and chemical processes from micro- to macro-scales. The processes involved in: production and energy transfer within pelagic food webs; export of energy to the benthos; the structure and dynamics of marine communities.

*Prerequisite(s):* BIOL\*3450, PHYS\*1080

**ZOO\*4600 Tropical Ecology F (1-6) [0.75]**

This three-week field course provides an opportunity to study the flora and fauna of marine, freshwater and terrestrial environments of the tropics. Based at field stations in Australia, the course includes lectures, field exercises and a student project. An information session is held in late November. Signature of course coordinator is required for course selection. Students are responsible for costs of food, lodging and transportation. Detailed information is available from the Department of Integrative Biology. 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\*1040, (BIOL\*2060 or BIOL\*3110)

*Restriction(s):* Instructor consent required.

**ZOO\*4610 Arctic Ecology F (1-6) [0.75]**

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 course coordinator is required for course selection. Students are responsible for cost of food and transportation. Detailed information is available from the Department of Integrative Biology. (Offered in even-numbered years.) 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\*1040, (BIOL\*2060 or BIOL\*3110)

*Restriction(s):* Instructor consent required.

**ZOO\*4700 Field Biology S,F,W (1-6) [0.50]**

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\*1040, (BIOL\*2060 or BIOL\*3110)

*Restriction(s):* Permission of the course coordinator.

**ZOO\*4710 Field Biology S,F,W (1-6) [0.25]**

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\*1040, (BIOL\*2060 or BIOL\*3110)

*Restriction(s):* Permission of the course coordinator.

**ZOO\*4800 Field Biology S,F,W (1-6) [0.50]**

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\*1040, (BIOL\*2060 or BIOL\*3110)

*Restriction(s):* Permission of the course coordinator.

**ZOO\*4810 Field Biology S,F,W (1-6) [0.25]**

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\*1040, (BIOL\*2060 or BIOL\*3110)

*Restriction(s):* Permission of the course coordinator.

## **XIII. Diploma Programs**

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For information about Associate Diploma Programs offered at the University of Guelph and regional campuses, please refer to the current Diploma Program Calendar. The current Diploma Program Calendar is available on the world-wide-web at [http://www.uoguelph.ca/diploma\\_calendar/](http://www.uoguelph.ca/diploma_calendar/).

## XIV. General Information

### Centres and Institutes

#### 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 promotes development cooperation partnerships with developing countries, provides information on international opportunities and resources to students and faculty, provides support for international students 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.

#### Computing and Communications Services

Students are encouraged to purchase or arrange access to a computer for general computing needs, including word processing and spreadsheet applications. The computing environment on campus is primarily Windows. Laser printing facilities are available in several areas on campus.

Whether you are off campus or in residence, Computing and Communications Services (CCS) can help you. Central computing accounts provide access to the Internet and instructional software. You will enjoy access to e-mail and the Web, increasingly important educational tools. All residence rooms are connected to the campus fibre-optic network, providing you with Internet access.

You can access your account from many of the over 1,000 campus microcomputers or via your own computer. Training seminars are available to introduce you to the major software packages and applications. CCS offers phone support through their Help Centre as well as walk-in support at their Help Desk in the Library. To get started, you can access the CCS web site at [www.uoguelph.ca/ccs](http://www.uoguelph.ca/ccs) for information and help.

### Child Care

The University of Guelph is consciously striving to provide equal opportunity for academically qualified students who are pregnant or have child care responsibilities, and to overcome barriers to full participation by such students in the University community. To this end, the University faculty and administration are sensitive to the need to assist students who are pregnant, or are parents, when unforeseen family responsibilities interfere with their educational endeavours. Students who require special consideration due to pregnancy or child care responsibilities are encouraged to speak to their course instructors or academic counsellors.

#### Campus Child Care Co-operative of Guelph

The Campus Child Care Co-operative of Guelph is a registered charitable organization incorporated as a co-operative non-profit day care. The centre is located on the edge of the University campus and offers care for 62 children between the ages of 3 months and 6 years. There are full-time and part-time programs offered weekly from 07:30 - 17:30. The child care centre is a family-supportive setting governed by a Board of Directors who are elected by the parent body. Parents are welcome to visit and participate in the program. The facility is open to children of OMAF employees, faculty, staff and students of the University and to the Guelph community. Subsidy is available for families that qualify for assistance. For further information contact Shelly Croth, Director at 822-1280.

#### University of Guelph Child Care and Learning Centre

The University of Guelph Child Care and Learning Centre is located on campus at the corner of East Ring Road and Arboretum Road. The Child Care and Learning Centre operates within the Division of Student Affairs in collaboration with the Department of Family Relations and Applied Nutrition, within the College of Social and Applied Human Sciences. The Centre has three primary goals:

- to provide family-sensitive, family-centred programs for children while their parents work or study
- to provide a resource for the academic community in which observation of children, research and practical experiences can take place
- to demonstrate excellence in child care and student training

The Centre offers 111 child care spaces for up to 10 infants, 15 toddlers, 64 preschoolers and 22 kindergarteners. Care is available for children from three months to 5 or 6 years of age on a full or part-time basis, Mondays through Fridays from 07:30 to 17:30. Parents may get involved in several ways, including membership on the Parent Advisory Council, attending parent information meetings, observing their children at play by using the specially designed observation facilities, or by visiting their child at any point during the day. Spaces are open to faculty, staff and students of the University of Guelph and to the Guelph community. Subsidy is available for families that qualify for financial assistance. Written enquiries may be directed to: Judy Callahan, Director, Child Care Services, University of Guelph, Guelph, Ontario, N1G 2W1, or call 824-4120 extension 52682.

### Copyright Policy

When a student produces a work eligible for copyright based on research or other scholarly activity conducted under the supervision of a faculty member and the supervision of that work is a requirement of the academic program, the University, whilst acknowledging the sole copyright ownership by the student, reserves the right of access to the work.

It is a condition of engaging in the undergraduate or graduate programs at the University that the University receives a non-exclusive royalty free license to:

1. Circulate the work as part of the University library collection;
2. Make copies or representations of the work for academic purposes within the University;
3. Make single copies of a thesis deposited in the University Library at the request of other universities or bona fide institutions;
4. Microfilm the work and submit the microfilm to the National Library of Canada;
5. Publish the abstract of any work which is a student thesis.

### Cultural Affairs

The University of Guelph promotes a wide range of activities in fine art, music and drama. These activities, some of which are integral to the teaching program of the College of Arts, are administered by the appropriate departments and schools of the College and by the Curator of Art.

### Guelph Campus Cooperative

The Guelph Campus Co-op was started in 1913 by students who knew they couldn't count on others to look out for their interests. So they organized their buying power. Their biggest concerns: the availability and cost of textbooks and finding a decent place to live. Sound familiar? Obviously a lot has changed since then. But not the principles behind the co-op. First and foremost, we're still by students for students. Students still dictate Co-op policy and our services are still focused squarely on making student life better. Perhaps most relevant to you is that we are not a profit-centred corporation. Getting more of your money is not our mandate. Saving you money is.

#### Guelph Campus Co-op Housing

Affordable and close to campus, the Co-op operates shared houses and apartments at below market rates. It's a better deal because our mandate is to serve students, not make big profits. Another reason it's affordable is that the deal includes your participation in the upkeep and running of your place. Sound reasonable? Apply early: only a limited number of units become available each term, and the waiting list can get pretty long. Application forms are available at the Co-op office at 17 College Avenue West (across from OVC) or our website at <http://www.guelphcampus.coop/>.

#### Co-op Bookstore

There are two bookstores on campus. Only one of them is owned by students. Where you spend your money counts. You get the lowest possible prices, and we'll always substitute good used texts when they are in stock. We'll also buy back your texts for cash any time throughout the year. When ordering, all you have to do is give us your order - in person, over the phone, or by email - and we'll get everything ready for you. We know textbooks, and we know the courses you're taking. So if you need help reviewing your course list needs, talk to us. That's part of our service. To check your course lists online, visit our web site at <http://www.guelphcampuscoop.org>.

Annual memberships are available for \$10 and entitle you to a 5 per cent discount at the Bookstore, use of Co-op resources, the right to apply for Co-op housing, and the right to vote and run for the Board of Directors. For more information call 824-4950 or email [info@guelphcampus.coop](mailto:info@guelphcampus.coop).

### Health and Performance Centre

The Health and Performance Centre is located on the second floor of the John T. Powell Building. It is easily accessed off of East Ring Road and is located near the Twin Pad Arena, Athletics and Student Health Services. The Centre provides service to all students and their families, staff and the general community.

The Health and Performance Centre specializes in the diagnosis, treatment and rehabilitation of acute and chronic orthopedic, musculoskeletal, sport and activity related injuries. The Centre also provides a variety of health promotion services including fitness and nutrition expertise. The Centre's multi-disciplinary team includes: sports medicine physicians, physiotherapists, athletic therapists, massage therapists, dietitians, pedorthist, chiropractor and fitness consultant.

Services are offered on a fee for service basis. Many of the services are eligible for coverage by provincial and international health plans, the University of Guelph student health plan and other extended health plans. Students are encouraged to investigate their health coverage.

The Health and Performance Centre is open from 8:00 a.m. to 8:00 p.m. Monday to Friday. For general enquiries and appointments, please visit the website at <http://www.uoguelph.ca/hpc> or call (519) 767-5011 or ext. 55011.

## Human Rights and Equity Office

The HREO is 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; TTY: 767-0615; Website: <http://www.uoguelph.ca/hre>.

*"The University of Guelph Human Rights and Equity Office (HREO) is dedicated to the removal of all systemic barriers, discrimination and harassment and will engage in advocacy within the university community towards this end."*

*(Mission Statement, Human Rights and Equity Office)*

The University of Guelph prohibits harassment or discrimination in work, study, residential and university life on the basis of: **race, colour, ancestry, place of origin (where you were born), ethnic background, citizenship, creed (religion), sex, disability, sexual orientation, 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.

The Ontario Human Rights Code and the Canadian Human Rights Act, as well as the University's Sexual and Gender Harassment Policy and Procedure and Interim Human Rights Procedure, prohibit harassment or discrimination on the basis of these grounds. The University of Guelph is currently developing a comprehensive human rights policy and complaints procedure to integrate and replace these existing policies and procedures.

The University's human rights policies and complaint procedures are available on the HREO Web Page at <http://www.uoguelph.ca/hre/>.

### Definitions

**Harassment** is defined as any attention or conduct (oral, written, 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.

**Discrimination** is defined as the denial of equal treatment, civil liberties, and/or opportunity to a group or member of the group on the basis of: race, colour, ancestry, place of origin, ethnic background, citizenship, creed (religion), sex, disability, sexual orientation, age, marital status, family status and, in some cases, receipt of public assistance or a pardoned criminal offense. Discrimination may be systemic wherein the policies and practices that have become standard in established institutions appear to be neutral but result in the exclusion of certain groups.

### Inquiries and Complaints

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. The HREO 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 the HREO regarding an administrative, managerial or curriculum decision which may relate to a human rights or equity issue. The HREO also provides human rights education and training and works in partnership with the University constituents on matters of educational and employment equity.

### Services

The HREO provides the following services to members of the University: information and advice regarding discrimination and harassment; facilitation of an internal human rights complaint procedure; mediation to resolve complaints; resource information on human rights and equity issues; training and education; participation on university committees; and research development and evaluation of equity initiatives.

## Information on Teaching Certificates

Students contemplating a teaching career are advised to contact the appropriate Faculty of Education to determine the subjects, credits, and grades required for admission. Information on all Ontario Faculties, as well as those in other provinces and some international schools, is available in the Connection Centre, 3rd Floor of the University Centre. Applications for the Ontario Faculties of Education can be found at <http://www.ouac.on.ca/teas>, along with the web links to each Ontario Faculty of Education. For more information email Career Services at: [careers@uoguelph.ca](mailto:careers@uoguelph.ca).

Brock University Faculty of Education St. Catharines ON L2S 3A1 (905)685-5550 ext.3591 < <a href="http://www.brocku.ca">http://www.brocku.ca</a> >	University of Windsor Faculty of Education 401 Sunset Windsor ON N9B 3P4 (519)253-4232 ext.3800 < <a href="http://www.uwindsor.ca">http://www.uwindsor.ca</a> >	Queen's University Faculty of Education Duncan McArthur Hall Kingston ON K7L 3N6 (613)533-6210 Fax: (613)-533-6584 < <a href="http://educ.queensu.ca">http://educ.queensu.ca</a> >
University of Ottawa Faculty of Education 145 Jean-Jacques Lussie Ottawa ON K1N 6N5 (613)562-5804 ext.4057 < <a href="http://www.uottawa.ca">http://www.uottawa.ca</a> >	Lakehead University Thunder Bay ON P7B 5E1 (807)343-8520 < <a href="http://www.lakeheadu.ca">http://www.lakeheadu.ca</a> > Fax: (807)344-6807	Laurentian University School of Education Ramsey Lake Road Sudbury ON P3E 2C6 (705)474-3450 ext. 5004 < <a href="http://www.laurentian.ca">http://www.laurentian.ca</a> >

Nipissing University Faculty of Education P.O. Box 5002 North Bay ON P1B 8L7 (705)474-3450 Fax: (705)474-1947 < <a href="http://www.nipissingu.ca">http://www.nipissingu.ca</a> >	York University Faculty of Education 4700 Keele Street Toronto ON M3J 1P3 (416)736-5002 Fax: (416)736-5613 < <a href="http://www.edu.yorku.ca">http://www.edu.yorku.ca</a> >	University of Western Ontario Faculty of Education 1137 Western Road London ON N6G 1G7 (519)661-2080 Fax: (519)661-3833 < <a href="http://www.edu.uwo.ca">http://www.edu.uwo.ca</a> >
The Ontario Institute for Studies In Education/University of Toronto 252 Bloor Street West Toronto, ON M5S 1V6 (416)923-6641 Fax: (416)926-4725 < <a href="http://www.oise.utoronto.ca">http://www.oise.utoronto.ca</a> >	Trent University (Co-operative Concurrent Teacher Education Program with Queen's University) Otanabee College Peterborough, ON K9J 7B8 (705) 748-1464 Fax: (705)748-1625 < <a href="http://www.trentu.ca">http://www.trentu.ca</a> >	

## International Students

The University of Guelph invites international students to apply for admission to our undergraduate and graduate programs. Financial awards and research grants are available to both undergraduate and graduate students.

The University supports the presence, and values the contribution, of international students in the cross-cultural learning and global understanding of the academic community and the City of Guelph.

## Inventions Policy

In the course of completing their degree requirements, undergraduate or graduate students may discover or help discover technology which might be patentable and/or have the possibility for commercial development. Any student who suspects this might be the case should, without delay, contact his or her research supervisor, if appropriate, and the Office of Research. Although the rights to such inventions are owned by the University, in accordance with the University's Invention Policy, a student who is an inventor or co-inventor would share in any revenues earned by the invention.

## Library

### Collection

The University's collection of books, journals, documents, maps, microforms, films, video and audio materials is administered in the McLaughlin Library building, located in the centre of the campus, and in a branch in the Ontario Veterinary College. The collection consists of more than 2.1 million equivalent volumes and is increasing at the rate of 50-60,000 per year. In addition, the library has over 12,000 audio-visual holdings (audio recordings, films and video tapes) and over 70,000 maps. Access to these materials and the collections at the University of Waterloo and Wilfrid Laurier University is available through the TRELIS system.

### Services

The collection is housed in a modern building, considered among the best in Canada. In a pleasant air conditioned atmosphere all students and faculty have open access to the collection. Both individual and group study facilities are provided. Presentation of the non-transferable University Card is required each time a book is borrowed from the Library. This card also provides University of Guelph users borrowing privileges at all other Ontario university libraries.

Each holder of a University of Guelph or special borrower card is fully responsible for all Library material borrowed using that card.

Library staff is available to offer help in the use of a wide range of paper and electronic information resources. Orientation tours and instructional classes in the use of the Library are available. Photocopying machines are located throughout the Library. Please refer to the Library's information sheet "Copyright Guidelines".

### Regulations and Hours

A series of leaflets detailing library privileges, services, regulations and hours may be obtained on the First Floor of the Library. For more information about the Library and its services visit <http://www.lib.uoguelph.ca> or <http://www.tug-libraries.on.ca>.

## OPIRG-Guelph

OPIRG-Guelph (Ontario Public Interest Research Group - Guelph) is a part of a provincial network of "PIRGs" that engage in research, education, and action on a variety of environmental and social justice issues. We often act as a bridge between the campus and community. Recent projects include a permaculture garden on campus, creation of an annual Environment Week pull-out in the Guelph Tribune. We continually host events and workshops on a range of topics. Working groups of OPIRG raise awareness of such issues as political prisoners worldwide, sustainable food growing practices, and unfair international labour practices.

OPIRG-Guelph maintains an alternative library with books, documents, periodicals, videos and DVDs that students and OPIRG members can access. The Research for Credit program allows students to apply their course work to community projects. Volunteer opportunities include being involved with or starting working groups, helping in the library or office, and sitting on the board of directors. Core funding (supplemented by grants and donations) is provided per semester through full-time graduate and undergraduate student fees. The fee is refundable in the first three weeks if requested. OPIRG (ext. 52129 or 824-2091) is located at 1 Trent Lane. OPIRG-Guelph can be reached by email at [opirg@uoguelph.ca](mailto:opirg@uoguelph.ca).

## Regular Officer Training Plan (ROTP)

Under the ROTP, undergraduates who are successful applicants are enrolled as Officer Cadets in the Canadian Forces. Applicants must be Canadian citizens and pass pre-enrolment tests. Application may be made prior to entrance, or at any time prior to the last year of university studies. Applications are processed through Canadian Forces Recruiting Centres. For more information contact the local Recruiting Centre at 1-800-856-8488.

## Statistics Canada - Notification of Disclosure

Statistics Canada is the national statistics agency. As such, Statistics Canada carries out hundreds of surveys each year on a wide range of matters, including education.

In order to carry out 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 only for statistical purposes, and the confidentiality provisions of the Statistics Act prevent the information being released in any way that would identify a student.

Students who do not wish to have their information released are able to ask Statistics Canada to remove their identification and contact information from the national database. For further information, please see Statistics Canada's web site at <http://www.statcan.ca> or write to the Postsecondary Section, Centre for Education Statistics, 17th Floor, R.H. Coats Building, Tunney's Pasture, Ottawa, Ontario, K1A 0T6.

## Student Computing

Students are encouraged to purchase or arrange access to a computer for general computing needs, including word processing and spreadsheet applications. The computing environment on campus is primarily Windows. Laser printing facilities are available in several areas on campus.

Whether you are off campus or in residence, Computing and Communications Services (CCS) can help you. Central computing accounts provide access to the Internet and instructional software. You will enjoy access to e-mail and the Web, increasingly important educational tools. All residence rooms are connected to the campus fibre-optic network, providing you with Internet access.

You can access your account from over 1,000 campus microcomputers or your own computer. Training seminars are available to introduce you to the major software packages and applications. CCS offers phone support through their Help Centre and as a partner in the Learning Commons, we provide walk-in support at the IT Help Desk in the Library. To get started, you can access the CCS web site at <http://www.uoguelph.ca/ccs> for information and help.

## Student Life

### Athletics

The University of Guelph offers students an excellent opportunity to combine academic pursuits with an athletics program of their choice. A quality athletics program is available to complement any student's leisure hours.

For skilled and competitive student athletes, dedicated to the pursuit of excellence, men's and women's intercollegiate programs are offered. The men's and women's teams compete in 17 team and individual sports at the provincial (OUA - Ontario University Athletics) and/or national levels (CIS - Canadian Interuniversity Sport). Prospective Intercollegiate athletes are urged to contact the coach by writing, phoning or emailing our Intercollegiate Office as soon as possible. Many teams require on- and off-season conditioning and training. For a full list of the intercollegiate sports offered, browse "Varsity Teams" on our web site at <http://www.gryphons.ca>.

The Department of Athletics offers a multitude of on-campus recreational opportunities to all members of the University community. These on campus programs cover four general areas: intramurals, interest classes, sports groups and clubs and recreational activities. They are geared to all levels of skill and interest. All on-campus programs begin early each semester. Students should consult the "RecreAction" brochure, or the Department of Athletics website for detailed information.

Intramural sports involve more than 6,000 people at various levels of competition. The intramural programs encourage groups of students: men, women and co-ed to "get together" in an enjoyable "competitive" or "fun" setting at their own skill level. Soccer, ultimate

frisbee, hockey, volleyball and basketball are very popular while the newest addition is badminton. Several one-day tournament activities are also offered. For a full list of sports, click on "Intramurals" on the athletics website.

More than forty different activities are offered in the interest class framework. Most of these programs are introductory in nature, providing participants with a foundation to continue these activities in future years. They range from CPR, dance, martial arts and aquatics to other various sports activities. In addition, there are a multitude of fitness programs that include both land and water classes operating throughout the day. For more information, consult the "Interest Classes" section of our website.

Sports Groups and Clubs provide another format for students to share their interest and enthusiasm through activity. The level and intensity of the activity will be determined by the demonstrated interest. Anyone interested in pushing themselves to new limits should definitely look into the Climbing Club. For a full list of sports groups or clubs, visit "Recreation and Clubs" on our website.

The University of Guelph has a wide range of indoor and outdoor facilities to service our varied, broad-based athletic programs. We have a stadium, lighted soccer, rugby, fastball and multi-purpose fields, four ball diamonds and four additional multi-purpose fields. The W.F. Mitchell Building has three gymnasiums, two pools, five squash courts, three dance/multi-purpose rooms, a weight room, circuit room, cardio theatre, combatives room and two climbing walls. The Gryphon Centre houses a twin pad arena and our Gryphon Dome has a 200 m running track and (163' by 116') indoor turf field. The Athletics facilities are open from 6:30 a.m. until 11:30 p.m. Sunday to Thursdays and until 9:00 p.m. Fridays and Saturdays. For further details, click on the "Facility section of our website.

The Department of Athletics also offers employment opportunities to students in a variety of capacities including lifeguards, fitness and lifestyle instructors, intramural referees, interest class instructors, event management staff, weight and circuit room staff, client service centre staff, camp staff as well as many other areas within athletics. Browse the "Facility" and "Fitness and Recreation" pages on our website to see a list of employment opportunities in Athletics.

### Learning Commons

The Learning Commons, located on the first floor of the McLaughlin Library, brings together in one location services that enhance learning, writing, research, and technology at the University of Guelph

**IT Help Desk** provides computers, printing, and scanning in addition to on-line resources, information, and assistance with various University-supported software.

**Learning Services** provides support to undergraduate and graduate students concerned with improving their learning and enhancing their academic performance. Services include a range of programs, workshops, presentations, printed and on-line resources, and individual assistance.

**Library Centre for Students with Disabilities (LCSD)** offers a range of services and adaptive software that enable students with disabilities to access Library as well as other information resources.

**Library Research Help Desk** assists students, staff and faculty in developing their information literacy skills in locating, evaluating, and effectively managing the information they need for their assignments and research.

**Supported Learning Group Program (SLG)** uses peer-led study sessions to enrich the learning experience of students enrolled in historically challenging courses including first year Chemistry, Computer Science, Economics, Mathematics, and Psychology.

**Writing and ESL Services** provides support to undergraduate and graduate students who wish to enhance their writing skills, as well as for those who are having difficulty writing critically and analytically, or whose first language is not English. Services include a wide range of programs, workshops, presentations, printed and on-line resources, and individual assistance.

For more information about the Learning Commons visit their web site at <http://www.learningcommons.uoguelph.ca>.

### Office of the Associate Vice-President, Student Affairs

The Associate Vice President, Student Affairs, is responsible for student life programs at the University of Guelph. This includes addressing the needs of individual students through specific student services programs and working to create an environment that is conducive to intellectual and personal growth.

The Office of Student Affairs is located in the University Centre, Level 4. The Associate V.P. (Student Affairs) is responsible for overall management of the Departments of Athletics, Student Health Services, Student Housing Services, Co-operative Education and Career Services, Student Life and Counselling Services, Child Care and the Learning Centre, also the Learning Commons in partnership with the Library, T.S.S. and C.C.S.

Student Affairs' Units provide learning opportunities and support services to help students achieve their goals in the context of the University's learning objectives and to be effective contributors in society. Student Affairs staff are committed to helping students by promoting a sense of personal responsibility and self-reliance in addition to assisting in specific problem-solving activities.

### Student Government

Student government at the University of Guelph includes the following organizations:

Central Student Association  
 Canadian Federation of Students  
 Canadian Federation of Students-Ontario  
 Other Student Groups

## Central Student Association

The more than 17,000 full-time and part-time undergraduate students at the University of Guelph are represented by the Central Student Association -- the official student association which is elected by all undergraduate students every year. When you pay your student fee (\$14.00 which is collected when you pay your tuition, and which also happens to be the lowest in Canada), you become a voting member of your student association. The C.S.A. receives its direction from a 32-member Board of Directors which is comprised of:

- representatives from each of the 7 colleges (two elected, one appointed);
- 5 executive members elected at large from the student body;
- representatives from various student organizations (Interhall, the Board of Governors, the Guelph Campus Co-op, OPIRG, and the Student Senate Caucus).

The C.S.A. has a three-fold purpose:

### Lobbying

The Central Student Association, in conjunction with the Canadian Federation of Students, and the Canadian Federation of Students-Ontario, works to ensure that the rights of students are heard at all levels. Everyone knows that there is strength in numbers. That's why the C.S.A. is the voice for all undergraduate students at the University of Guelph. The C.S.A. works to provide change when the rights of students are being infringed upon.

### Representation

The Central Student Association represents all University of Guelph undergraduate students to the provincial and federal governments, the University Administration, the Board of Governors, the Senate, City Council, the Guelph Transit Commission, and various standing committees, task forces, and commissions, as they arise. This is done to ensure that all of the rights of students are maintained in all decision-making bodies.

### Services

Entertainment and Activities: movies, speakers, concerts, student academic appeals, orientation, faxing, photocopying, and over 70 clubs to join. The C.S.A. provides opportunities for you to expand beyond the world of formal academics by providing services that make student life at this University less cumbersome and a lot more fun!

The Central Student Association is located on the 2nd floor of the University Centre, Room 274. The phone extension is 56748, the email address is csatalk@uoguelph.ca and the website is located at <<http://www.csa.uoguelph.ca>>. The day-to-day operations of the Central Student Association are coordinated by the 5 executive and 3 staff members. Executive members can be contacted at the following on-campus extensions and email addresses:

Academic Commissioner - csaacad@uoguelph.ca - x56742  
 External Commissioner - csaext@uoguelph.ca - x58328  
 Local Affairs Commissioner - csalocal@uoguelph.ca - x54407  
 Finance and Human Resources Commissioner - csaadmin@uoguelph.ca - x54408  
 Communications Commissioner - csatalk@uoguelph.ca - x56376

## Canadian Federation of Students

The C.F.S. is the national voice of students, representing more than 400,000 students across the country. The C.F.S. lobbies the federal government for changes which are aimed at making post-secondary education more accessible to all students. They provide research documents, campaigns, and services for all members across the country.

## Canadian Federation of Students-Ontario

The C.F.S.-O. is the provincial voice of students, representing more than 200,000 students across the province. The C.F.S.-O. lobbies the provincial government for changes which are aimed at making post-secondary education more accessible to all students. They provide research documents, campaigns, and services for all members across the province.

## Other Student Groups

Other important groups on campus include College Student Governments, Interhall Council, the Guelph Campus Co-operative, and the Ontario Public Interest Research Group. All of the above organizations combine to make Guelph one of the most active campuses in the country. We hope that you continue in that tradition, and come on up to the C.S.A. office (University Centre 274) or give us a call at extension 56748. Remember that your education does not end when class is over. So make a difference in your university experience by getting involved with your student association.

## Student Health Services

Student Health Services, located in the John T. Powell Building, provides comprehensive medical and healthcare services to all students and their immediate families.

Student Health Services provides acute care intervention and continuing care for any health related problems. Health Services has a multi-disciplinary team that includes family physicians, psychiatrist, nurses, dietitians, and health educators. In addition to appointment

clinics, specialty programs include the Wellness Centre, Walk-in Clinic, a dispensary and immunization clinics.

Students are required to bring their OHIP card, other provincial health plan information or UHIP card when attending Health Services for care.

To make an appointment, for general enquiries, hours of operations or for after-hour care information call extension 52131.

## Student Housing Services

### Living on Campus

Student Housing Services wants you to feel that residence is your home; a place where you can study, develop lasting friendships, become involved in University activities, or just relax. Each building has a professional Residence Managers and a Residence Life Staff comprised of students. They are there to meet you in September, introduce you to others in the building, and act as resource people throughout the year.

Residence living is convenient. A full range of services is provided to residence students. Each room comes completely furnished and includes a telephone and voicemail. The residences are equipped with laundry facilities, study rooms, lounges, and other common spaces. Renowned for its excellence in food service, Guelph provides 14 different on-campus food facilities including dining halls that cater mainly to residence students.

A variety of living accommodations is available: quiet areas, co-educational and all-female residence halls including traditional residence halls, a building of self contained suites, modern townhouses and two sites for students with families. Buildings range in size from those for 50 people, to a unique residence complex which houses almost 1,800 students in small living units.

The University of Guelph has several unique residence learning communities including La Maison Francaise, Arts House, International House, Eco House and Academic clusters.

### Family Housing

Accommodation for students with families is available in apartment and townhouse units located on two sites near the west end of the campus. With close proximity to campus and a strong sense of community, these facilities are in very high demand. If you are considering applying for Family Housing, please contact the Family Housing Office (ext. 52551).

### Off Campus Housing

Student Housing Services operates the Off Campus Housing Office, which maintains listings of various types of accommodation in the Guelph area. The office can help you with where and when to look for housing, can advise or make referrals on landlord/tenant issues, and has information that can make your housing search, and getting settled in, easier. Listings can be viewed at <http://www.housing.uoguelph.ca/ocho>.

### Further Information

For further information on individual residences and application procedures, please refer to the University of Guelph Admissions Handbook or contact Student Housing Services, University of Guelph, Guelph, Ontario, N1G 2W1. Telephone: (519)824-4120, extension 58701. Fax: (519)767-1670. E-mail: [resadmit@uoguelph.ca](mailto:resadmit@uoguelph.ca). Web site: <http://www.housing.uoguelph.ca>.

## Student Life and Counselling Services

Student Life and Counselling Services fosters academic success, personal development, and spiritual growth by engaging students in the life of the campus and greater community and supporting them through the many transitions they experience during their university career.

Because learning takes place both inside and outside of the classroom, we encourage students to take part in the following programs and services:

**Multi Faith Resource Team** is a multi-faith service providing pastoral care and worship services. This group of religious persons, representing major world religions, sponsors programs related to agriculture, feminism, justice and spirituality. An interfaith resource centre is open to students

**The Centre for Students With Disabilities** assists students with disabilities by providing counselling and support, arranging appropriate classroom and exam accommodations and promoting greater awareness and understanding of disability issues in the university community.

**The Information Desk**, located at the South Entrance to the 1st floor of the University Centre and the Connection Centre, an integrated resource centre housing materials on a wide range of student career development, student employment, and transition topics, on Level 3 of the University Centre.

**Contact Help and Safety Line** is an after-hours phone line available to all members of the University community. Trained volunteers offer support and referral services to callers. All calls are confidential and anonymous. The Contact Line is open from 6:00 p.m. to 12:00 midnight every day.

**Counselling Services** offers professional counselling to help students deal with personal or psychological problems in order to foster personal and academic growth. Both individual and group counselling therapy are provided.

**Student Support Network** volunteers provide personal support, information, a listening ear and referrals on an informal drop-in basis. Any member of the university community

is welcome to use the Drop-In when they wish to talk to someone or wish information. Raithby House Drop-In is staffed by trained student volunteers. The House Drop-In is open Monday to Friday from 4:00 p.m. to 12:00 midnight. You will see The House flag flying when we are open.

**Student Life** supports the mission and strategic directions of the University of Guelph by offering comprehensive programs and services that help students make successful transitions to, through and from university life and study. Curricular and co-curricular initiatives and advising and support activities serve as vehicles, through which students explore their leadership capacity, make lasting connections, optimize opportunities for learning through experience, develop civic responsibility, and engage in campus and community life. Student Life includes the Aboriginal Resource Centre, Centre for New Students, Citizenship and Community Engagement, the office of the International Student Advisor, Leadership Education and Development, Neighbourhood Relations, and Student Activities.

### Co-operative Education & Career Services

Co-operative Education and Career Services facilitates student learning and career development, helps produce skilled graduates, and meets employer and labour needs. With over 1,600 co-op students, U of G enjoys one of the highest student enrollment in co-operative education among Ontario universities. By working in partnership with industry, co-operative education aims to enable students to "learn by doing", and to allow employers to select and train the workforce of tomorrow. Career Services aims to help students, graduates and alumni succeed in their transition to the world of work or further education. Career Services provides a variety of comprehensive career development and job search planning programs and events to ensure access to a wide variety of employment possibilities and help our clients learn to self manage their careers.

## Student Rights and Responsibilities

Student membership at the University of Guelph is associated with fundamental rights and responsibilities intended to maintain the integrity of the University as a community for learning. Staff, faculty and students co-operate to sustain an education environment that promotes individual learning and development.

The University accepts that students are able to make responsible decisions regarding their behaviour. These regulations help to provide for an environment that supports personal and intellectual growth. They are intended to recognize a student's rights and the rights of others, while also identifying certain responsibilities of students that are a part of the exercise of these rights.

For purposes of *Student Rights and Responsibilities*, a student is any person registered in an undergraduate or graduate program at the University of Guelph, or otherwise taking credit or non-credit courses offered by the University or any person who was a student at the time the alleged offence occurred.

Students have the RIGHT to access the Judicial system if a violation of this policy has occurred, whether that violation has occurred on or off campus provided that the violation affects their ability to use and enjoy University facilities.

### University Community Principles

The University of Guelph is dedicated to the advancement of learning and the dissemination of knowledge; the intellectual, social, moral and physical development of its members; and the betterment of society (University of Guelph Act, 1964). These overall goals commit us to three central values:

- The development of all members of this university community, which implies and affirms the dignity, worth and autonomy of the individual.
- A focus on learning and knowledge, which upholds the fundamental importance of reasoned debate and inquiry in all of this university's academic and service functions.
- Societal enhancement, which extends the commitment to individual development beyond the walls of the institution to the ideal of service to the broader community.

### Academic Responsibilities

You have the RIGHT to engage in free intellectual enquiry and, within the limits of the materials and human resources and approved University protocols, to access the resources necessary to plan and accomplish your educational and career objectives. You have the RESPONSIBILITY to:

- pursue the Learning Objectives\* established by the University in the context of your own program and goals;
- adhere to the schedule of dates\* and academic and non-academic regulations;
- select courses based on academic program requirements\*;
- consult your academic advisor (Program Counsellor, Departmental Advisor, Graduate Coordinator) or the relevant Academic Review Committee if extenuating circumstances affect your academic performance;
- abide by the University's Policy on Academic Misconduct.<sup>1</sup>

<sup>1</sup> Refer to the Associate Diploma Calendar; Undergraduate and Graduates calendars, available electronically at [http://www.uoguelph.ca/undergrad\\_calendar/](http://www.uoguelph.ca/undergrad_calendar/) or <http://www.uoguelph.ca/GraduateStudies/calendar>

## Offenses

### I. Civil/Criminal Statutes.

You retain your RIGHTS as a citizen when you become a member of the University community. You have the RESPONSIBILITY to abide by Federal, Provincial and Municipal statutes in addition to the University's own regulations, including, but not limited to the Acceptable Use Policy and Guidelines for the University of Guelph Computing and Networking Facilities<sup>2</sup> and the In-line Skates, Roller Blades and Skateboards Policy<sup>3</sup>. The University's interest may cause it to initiate a hearing (refer to Judicial Processes) whether or not criminal or civil action is taken with respect to the same incident(s).

<sup>2</sup> Refer to the University's Acceptable Use Policy available on line at <http://www.uoguelph.ca/AUPG.html>.

<sup>3</sup> Refer to the University's In-Line Skates, Roller Blades and Skateboards Policy available at the Director's Office at each Regional College or electronically on the University's Financial Services website: <http://www.fin.uoguelph.ca/uploadFiles/GE380.pdf>.

### II. Offenses against Persons.

#### 1. Bodily Harm

You have the RIGHT to an environment that is safe and free from unwanted attention. You have the RESPONSIBILITY not to engage in activities 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.

#### 2. Harassment

You have the RIGHT to an environment characterized by mutual respect. You have the RESPONSIBILITY to treat all members of the University community with respect and without harassment. Harassment is defined as any attention or conduct (oral, written, 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.

### III. Offenses involving Property.

#### 1. Facilities, Telecommunications, Library, University Property and Private Property

You have the RIGHT to the use of University facilities. You have the RESPONSIBILITY to:

1. respect posted hours and limits on entry where such conditions exist;
2. confine smoking only to areas designed for that purpose;
3. not destroy, tamper with, deface or vandalize, monopolize, unlawfully access, remove or possess property not your own, including, but not limited to, Library material, computing facilities, telecommunication systems, and emergency telephones;
4. not discharge, tamper with or operate any fire prevention or detection equipment for any purpose other than the control of fire. (For students found guilty of offences under this section, mandatory minimum penalties apply.)

#### 2. Permits and Identification

You have the RIGHT, upon payment of any required fee, to access certain special services as a University community member. You have a RESPONSIBILITY not to acquire or use meal cards, University identification, computer identification, bus passes or parking permits that are stolen, cancelled, lost, false, altered or expired.

#### 3. Grounds

You have the RIGHT to use of the University grounds. You have the RESPONSIBILITY to observe the following specific limitations:

1. **Authorized Entry** - posted hours and limits on entry must be observed and adhered to.
2. **Bicycles** - Bicycles are subject to removal at the owner's expense if they are secured to trees or railings, secured to ramps for the disabled, left in fire routes or stairwells of any University building or otherwise found obstructing by being in any unauthorized area.
3. **Automobiles** - Automobiles are subject to removal at the owner's expense if left in fire routes, area for disabled access, pedestrian walkways, driveways, or otherwise found obstructing by being in an unauthorized area.
4. **Temporary Accommodation** - Sleeping or maintaining residence in vehicles, trailers, tents or University facilities is prohibited, except where specifically authorized.
5. **Pets** - Pets on campus must be under direct control at all times and must not be left unattended. Pets are not allowed in University buildings except as authorized.

### IV. Disruption.

You have the RIGHT to an environment that, while safeguarding dissent, is free from interference and disruption. You have the RESPONSIBILITY not to 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 out their legitimate activities, including their ability to speak or associate with others.

## V. Other.

1. **Drugs and Alcohol.** You have the RESPONSIBILITY to abide by the Provincial Liquor Licence Act and Provincial and Federal statutes pertaining to illegal drugs and alcohol. The possession, use or trafficking of illegal drugs is prohibited, and each activity may form the basis of a separate charge. For students found guilty of a drug offence within Student Housing, mandatory minimum penalties will apply. The possession of liquor by those under the age of 19, is prohibited. Consumption or open possession of liquor is prohibited, other than in those residence rooms where it has been specifically permitted or in licensed premises.
2. **Visitors.** You have the RIGHT, upon compliance with existing sign-in requirements (Student Housing Services and licensed establishments), to have visitors on campus. As their sponsor, you have the personal RESPONSIBILITY to ensure that your guests abide by these regulations.
3. **Firearms and other Weapons.** Firearms, any other weapons, firecrackers, gunpowder, or any other forms of unauthorized explosive or volatile materials are prohibited on campus.

## Judicial Processes

Every student has a RIGHT to a full and fair hearing, by an impartial tribunal, of the merits of any charge brought against him or her under these regulations. Every student who is charged with a non-academic offence has a right to present a full and complete defense, and to be accompanied by an advisor (or legal counsel) at any hearing of the charge against him/her. Students charged are presumed innocent until found guilty on the basis of evidence presented, using the balance of probabilities as the standard of proof. The University has devised a process which provides for appropriate disciplinary penalties to be imposed. These penalties may include fines (up to \$1,000), non-academic probation periods, warnings and, in extreme cases, a recommendation for suspension or expulsion. Every student has a responsibility to comply with a Summons or Decision and Order of the Judicial Committee and/or Hearing Board. Failure to do so may constitute a breach of *Student Rights and Responsibilities*.

The President or designate may implement an interim suspension if, in his/her opinion, a student's conduct raises a reasonable apprehension of harm to the student or to others in the University community, or the normal functioning of the University. A Judicial proceeding will be undertaken as soon as possible to allow for a hearing of the case and, in any event, no longer than fourteen (14) working days from the laying of the charge.

The Judicial Committee at the main campus and each Regional College has the authority to enforce these regulations if a breach of the regulations occurs off campus, which affects the rights of the members of the University community to use and enjoy University facilities.

Each Judicial Committee is an appointed tribunal of students, staff and faculty that hears reported incidents of student behaviour that represent alleged infractions of the student regulations and formal complaints against students under the policy *Human Rights at the University of Guelph*<sup>4</sup>. The Judicial Committee may also act as an appeal body to hear appeals regarding decisions of a non-academic nature imposed by a University of Guelph department or Regional College where there is no other existing appeal process.

Decisions of a Judicial Committee may be appealed to the Hearing Board or in the case of the Regional Colleges, the Appeal Board. The Hearing/Appeal Board is a student/faculty/staff tribunal. The Board hears appeals from decisions of the Judicial Committee when one or more of the grounds for appeal are satisfied.

Further information on the Judicial process may be obtained from the Judicial Officer, Senate Office, 4th floor, University Centre, ext. 53116 (or from the Director's Office at each Regional College). Terms of Reference and Rules of Procedure documents for the Judicial Committee are available on-line at [http://www2.uoguelph.ca/studentaffairs/home/documents/judicial\\_committee\\_terms\\_of\\_ref\\_approved\\_june04\\_000.pdf](http://www2.uoguelph.ca/studentaffairs/home/documents/judicial_committee_terms_of_ref_approved_june04_000.pdf). Frequently asked questions for charges under Students Rights and Responsibilities (SR&R) are available at [http://www2.uoguelph.ca/studentaffairs/home/documents/judicial\\_committee\\_student\\_information\\_000.pdf](http://www2.uoguelph.ca/studentaffairs/home/documents/judicial_committee_student_information_000.pdf).

Further information and copies of the Student Rights and Responsibilities document are available from the Office of Student Affairs, 4th floor, University Centre, at ext. 53868 for from the Director's Office at each Regional College. It can be viewed on-line at [http://www2.uoguelph.ca/studentaffairs/home/documents/student\\_rights\\_responsibilities.pdf](http://www2.uoguelph.ca/studentaffairs/home/documents/student_rights_responsibilities.pdf).

Comments on the document and specific suggestions for amendments or additions to the student regulations are welcome at any time and should be referred to the Office of Student Affairs.

<sup>4</sup> Refer to the Human Rights at the University of Guelph document, available on-line at <http://www.uoguelph.ca/hre/>.

## Students With Disabilities (CSD)

The University of Guelph is committed to creating a barrier-free environment. We feel that providing services for students with disabilities is a shared responsibility among students, faculty and administration. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open, supportive learning environment.

The CSD is staffed with special needs advisors, strategists and specialists and administrative support. Our services are complemented by Peer Helpers and volunteers

who provide one-to-one assistance. When necessary, referrals are made to other services such as personal counselling, career counselling and Student Health Services.

The CSD provides support by implementing appropriate exam and classroom accommodations, advising students on academic, personal, disability issues and educating students in the development of learning strategies.

## Admission Procedures

The University of Guelph is committed to ensuring equal access for students with disabilities. The University encourages applications from students with disabilities and will provide admission information to applicants in alternate formats (Braille, audio tape) upon request.

If you need assistance with the admission process or your marks do not reflect your ability, contact the Centre for Students with Disabilities or Admission Services (extension 58721) for further information.

All information that you provide is held in confidence and the disclosure of a disability will in no way jeopardize your chance of admission.

*Upon admission*, students requiring services and accommodations related to their disability must forward supportive documentation of their disability to the Centre for Students with Disabilities. In the case of students with learning disabilities, documentation should include a recent and valid psycho-educational assessment.

## Services

The Centre for Students with Disabilities (CSD) works with students who have hearing, visual, learning, medical, physical or psychological disabilities. The Centre has a variety of resources providing support and resources that will facilitate success in the academic process. Resources such as taped texts, writing tutors, computer assisted technology, photocopy services, notetakers, interpreters and library assistance are available. Counselling is provided in the academic, financial, residential and personal areas. Advisors will also liaise with faculty to ensure that the proper classroom and exam accommodations are available to the student. A learning disabilities strategist is available to provide students with learning disabilities learning strategy instruction and counselling related to their disability. The CSD is located on the 3rd Floor, University Centre, extension 56208.

## University Bookstore

**The University Bookstore**, located in the MacNaughton Building, carries every textbook required for every course and all the stationery supplies students need. The Bookstore also stocks as many used textbooks as possible to help students defray costs. As well as academic material, the Bookstore offers a wide selection of University clothing and gifts, popular paperbacks and magazines.

**Pages Coffeehouse**, located on the second floor of the University Bookstore, features a full service Tim Hortons. Students can relax and enjoy soup, sandwiches and baked goods Monday through Friday.

## University Centre

The University Centre exists both as a service and community centre. The University Centre is governed by a Board composed of representatives from the University Centre user groups, including undergraduate and graduate students, faculty, administration, staff and alumni. This group of people, appointed on a two-year basis, is charged with the responsibility of ensuring the University Centre's goals are met through policy and planning. Within the Centre, numerous administrative departments, commercial services, student organizations and programming facilities exist for the convenience and enjoyment of all members of the University Community. A wide variety of shops and services are located on the first floor of the University Centre surrounding an open courtyard.

**Centre Six Food Court** opens early and closes late, offering a wide array of specialty shops including Nature's Best Vegetarian, Exhibition Cooking and the Wokathon. Enhancing the variety are several popular brands such as Subway, Tim Hortons, Williams Coffee Pub, Taco Bell, KFC and the Pita Pit.

**The University Centre Variety and Gift Shop**, located on the main floor, carries a wide selection of greeting cards, magazines, gift items and provides a full service Post Office.

**The Daily Grind** is a casual coffeehouse serving Starbucks and fairly traded coffees, Booster Juice, gourmet sandwiches, salads and delicious baked goods. This is a great place to meet with friends, study, read or watch your favourite TV shows.

The **Brass Taps** (level 2), with its relaxed atmosphere and excellent weekly entertainment line-up (never a cover!), is a favourite campus meeting spot. The Taps kitchen offers a wide range of daily specials and a menu geared to the many diverse appetites found on campus. Meal Plans accepted.

The **Programming Department** offers a wide selection of entertainment and cultural events to the University Community. As well, this department offers students, staff and faculty assistance in setting up their own entertainment programs on campus. The **Performance Season** features concerts and plays held both on and off campus at such locations as the River Run Centre, War Memorial Hall and Peter Clark Hall.

The **Programming Office** presents a number of weekend fairs of interest to students, faculty and staff. The most successful and popular of these has proven to be Fair November, our annual fall Craft Show.

On Level 0 the facilities include the Music Practice Room, the Off Campus Student Lounge, Mail Services, and Loading Dock with courier pick up and delivery service. Peter Clark Hall is located in this level as well.

Level 1 houses many businesses including a travel agency, a dentist, a chiropractor/massage therapist, a CD shop, a hair salon, a sign making shop, a photographer and bank machines. Also located on Level 1 is the Women's Resource Centre, an information desk, the 103 meeting room and the various courtyard activities and sales.

On Level 2 of the University Centre, office space and operational facilities are provided for the University Centre Building Administration and the Central Student Association. Space and operational facilities are also provided for the various clubs and organizations of the Central Student Association, the *Ontarion* (a weekly campus tabloid newspaper) and CFRU-FM or Radio Gryphon. The CUPE 3913 office is also located on this level.

Levels 3 holds many meeting rooms which can be booked through the University Centre Administration office. The CUPE 1334 office is also located on this level. Administrative offices are located on this level and include the Office of Registrarial Services, Co-operative Education & Career Services, Student Life and Counselling Services, Undergraduate Academic Information Centre, and The Centre for Student's with Disabilities.

Level 4 North houses meeting rooms and the Steelworkers Union Office and Catering and Conference Services for the University.

Level 4 South houses the University's Administrative Offices.

Level 5 North houses the University Club (formerly the Faculty Club), the Graduate Students' Association and the Older-Than-Average Students Lounges. Other facilities include the Graduate Students' Association Administrative Office, the Chapel and the Professional Staff Association.

Level 5 South houses the University's Financial Services, Purchasing and Human Resources Departments.

The University Centre is a meeting place for people engaged in a wide spectrum of activities. It is the focal point or "living room" for the University Community and was built for the benefit of its many user groups.

The University Club (formerly the Faculty Club), the Graduate Students' Association and the Older-Than-Average Students have lounges on Level 5 of the University Centre. Other facilities include the Music Practice Room. Administrative offices are located on Levels 3, 4 and 5 of the University Centre including the Office of Registrarial Services, Office of Student Affairs, Cooperative Education & Career Services, Student Life and Counselling Services and Financial Services. The University Centre is a meeting place for people engaged in a wide spectrum of activities. It is the focal point or "living room" for the University Community and was built for the benefit of its many user groups.

## University I.D. Cards

A University I.D. 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, initials and identification number; a colour photograph of the cardholder; the cardholder's signature; a bar code 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 and may only be used for identification purposes.
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 Undergraduate Program 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 Undergraduate Program Services, Office of Registrarial Services, Level 3, University Centre for assistance.
7. Loss or finding of the University Card should be reported to Undergraduate Program Services, Office of Registrarial Services, Level 3, University Centre, during regular University office hours. At other times, a preliminary notification may be made during Library hours at the Circulation Information Desk on the main floor of the Library.
8. Replacement charge is \$20.00.

## XV. Summary of Attendance

November 1, 2005 Enrolment Statistics and Systems, Office of Registrarial Services

UNDERGRADUATE PROGRAMS (UG) - FULL-TIME									
Program / Semester Level	1	2	3	4	5	6	7	8+	Total
Associate Diploma Programs	14	16	25	5	-	-	-	-	60
B.A.	1,183	126	1,207	200	1,051	365	623	228	4,983
B.A.Sc.	142	7	134	14	189	17	112	37	652
B.A.S.	100	3	76	14	63	25	37	11	329
B.Comm.	499	57	526	89	594	112	335	91	2,303
B.Comp.	34	9	37	26	73	17	23	13	232
B.L.A.	36	3	26	5	32	7	29	9	147
B.Sc.	1,007	108	997	157	1,078	229	563	261	4,400
B.Sc. (Agr.)	67	4	77	26	86	24	48	34	366
B.Sc. (Eng.)	95	12	95	56	197	69	76	53	653
B.Sc. (Env.)	72	5	67	10	82	16	48	13	313
B.Sc. (Tech.)	23	-	10	2	4	2	2	10	53
D.V.M.	111	-	109	-	108	-	105	-	433
General Studies	5	1	-	1	-	-	-	-	7
Honours Equivalency	-	-	-	-	-	1	7	3	11
Non-Degree	19	4	4	-	2	-	-	16	45
Non-Diploma	-	-	-	-	-	-	-	-	0
<b>UG Full-time Enrolment</b>									<b>14,987</b>
UNDERGRADUATE PROGRAMS (UG) - PART-TIME									
Program / Semester Level	1	2	3	4	5	6	7	8+	Total
Associate Diploma Programs	-	-	1	2	-	-	-	-	3
B.A.	31	66	52	49	89	200	49	132	668
B.A.Sc.	3	3	4	5	4	3	6	6	34
B.A.S.	2	-	3	2	2	3	1	-	13
B.Comm.	5	16	23	32	21	21	21	50	189
B.Comp.	1	6	10	7	2	14	5	4	49
B.L.A.	-	-	5	-	-	1	-	2	8
B.Sc.	23	29	33	38	26	40	20	108	317
B.Sc. (Agr.)	4	1	2	2	2	4	2	2	19
B.Sc. (Eng.)	3	3	2	1	1	4	16	15	45
B.Sc. (Env.)	-	3	6	1	1	1	3	15	30
B.Sc. (Tech.)	1	-	1	4	1	2	5	4	18
D.V.M.	-	-	-	-	-	-	-	-	0
General Studies	37	5	1	-	1	-	-	-	44
Honours Equivalency	-	-	-	-	-	1	3	10	14
Non-Degree	27	4	1	1	-	1	1	25	60
Non-Diploma	-	-	-	-	-	-	-	-	0
<b>UG Part-time Enrolment</b>									<b>1,511</b>
<b>Total UG Enrolment</b>	<b>3,544</b>	<b>491</b>	<b>3,534</b>	<b>749</b>	<b>3,709</b>	<b>1,179</b>	<b>2,140</b>	<b>1,152</b>	<b>16,498</b>
GUELPH-HUMBER UNDERGRADUATE PROGRAMS (UGH) - Full-Time									
Program / Semester Level	1	2	3	4	5	6	7	8+	Total
BAC	27	4	23	4	1	1	-	1	61
BAMS	117	13	120	7	100	7	53	2	419
BASC	117	10	111	28	126	13	-	-	405
BBA	226	20	188	33	270	23	102	2	864
<b>UGH Full-Time Enrolment</b>									<b>1,749</b>
GUELPH-HUMBER UNDERGRADUATE PROGRAMS (UGH) - Part Time Enrolment									
Program / Semester Level	1	2	3	4	5	6	7	8+	Total
BAC	1	2	-	13	-	1	-	-	17
BAMS	1	-	1	-	-	1	-	-	3

BASC	3	6	9	52	29	2	-	-	101
BBA	1	4	5	4	3	1	-	-	18
Non-Degree	3	1	-	-	-	-	-	-	4
UGH Part-Time Enrolment									143
Total UGH Enrolment									1,892
Total UNDERGRADUATE Enrolment (UG and UGH)									18,390
GRADUATE PROGRAMS (GR)									
Program	Full-time				Part-time			Total	
D.V.Sc.	45				-			45	
Graduate Diploma in Veterinary Medicine	4				1			5	
M.A.	240				3			243	
M.B.A.	129				12			141	
M.ENG.	9				4			13	
M.F.A.	-				-			0	
M.L.A.	50				3			53	
M.SC.	737				82			819	
M.SC. (AQUA.)	3				-			3	
M.S.P.L.	49				6			55	
PH.D.	627				45			672	
Non-Degree	1				-			1	
Total GR Enrolment	1,894				156			2,050	
TOTAL UNIVERSITY ENROLMENT									20,440

## XVI. Administration and Faculty

### Administration and Faculty

#### The Board of Governors

**Hon. L.M. Alexander**, Chancellor

**D.L. Derry**, Chair

**R. Burak**, Vice-Chair

**B. Allan**, Secretary

**A. Abram**

**K. Bardswick**

**B.W. Barrington**

**C.J. Clark**

**P.J. Devine**

**D. Freeborough**

**J. Guss**

**S. Hilts**

**G.S. Kilgour**

**A. Lister**

**J. Lozon**

**L. Mahood**

**K. Neale**

**R.A. Norris**

**N. Schmidt**

**P. Shewen**

**E.W. Siddall**

**A.J.S. Summerlee**, President

**B. Teesdale**

**Hon. L. Vancief**

#### Honorary Fellows of the University

**A.P. Auger**, Guelph

**W. Brock**, Toronto

**C.H. Franklin**, Toronto

**N.W. Hoag**, Guelph

**T.L. Jones**, Toronto

**M.H.M. MacKinnon**, Guelph

**E.B. MacNaughton**, Guelph

**A.R. Marchment**, Toronto

**T.A. McEwan**, Mississauga

**K. G. Murray**, Kitchener

**N.O. Nielsen**, Guelph

**J.C. Rennie**, Guelph

**N.R. Richards**, Guelph

**K. Ronald**, Guelph

**J.W. Skinner**, Guelph

**C.M. Switzer**, Guelph

**J.M. Wardlaw**, Guelph

**W.C. Winegard**, Guelph

#### Medal of Merit

**H.D. Ayers**, Guelph

**G.D. Bedell**, Camden, Maine, U.S.A.

**M. Beverley Burton**, Guelph

**H.G. Downie**, Guelph

**F.D. Horney**, Guelph

**T.J. Hulland**, Guelph

**J.L. Hunt**, Guelph

**B.M. McCraw**, Guelph

**J.T. Powell**, Guelph

#### John Bell Award

**J. Cunsolo**, Guelph

**W.T. Dickinson**, Guelph

**T.F. Funk**, Guelph

**T.J. Gillespie**, Guelph

**G.L. Lange**, Guelph

**T.E. Michaels**, Guelph

**A.L. Middleton**, Guelph

**D.M. Prescott**, Guelph

**G.A. Stelter**, Guelph

**R.R. Stoltz**, Guelph

**H.J. Swatland**, Guelph

#### The Lincoln Alexander Medal of Distinguished Service

**G.L.E. Nixon**, St. Catharines

**H. Vander Pol**, Blenheim

**S. Surgeoner**, Fergus

#### Administrative Officers

##### Office of the President

**A.J.S. Summerlee**, President and Vice-Chancellor, B.SC., B.V.SC., PH.D. (BRISTOL), MRCVS

**V. Hodgkinson**, Executive Assistant, B.A. (YORK, CAN.), M.A. (GUELPH)

##### Office of Resource and Planning Analysis

**C.A. Beattie**, Acting Director, B.SC. (GUELPH)

**S. Teja**, Research Associate, M.A. (GUELPH)

**M. Kupferschmidt**, Research Associate, B.A. (GUELPH)

**M. Conrad**, Research Associate, B.E.S. (WATERLOO), M.SC. (MCMASTER), PH.D. (QUEEN'S)

##### Office of the Provost and Vice-President (Academic)

**M. Mancuso**, Provost and Vice President (Academic), B.A. (MCM.), M.A. (CAR.), D.PHIL. (OXF.)

**A. Shepard**, Associate Vice-President (Academic), B.A. (ST. OLAF), PH.D. (VIRGINIA)

**B. Whiteside**, Associate Vice-President (Student Affairs), B.A., M.A. (GUELPH)

**T. Alberico**, Manager of Faculty Recruitment and Retention and Executive Assistant to the Provost, B.SC. (GUELPH), CHRP.

**K. Revington**, Acting Secretary of Senate, B.A. (QU.), M.ED. (BOSTON)

**S.G. Dorr**, Acting Judicial Officer and Co-ordinator of the Undergraduate Academic Information Centre, B.A., M.A. (Leadership) (GUELPH)

**M. Smart**, Acting Co-ordinator of Undergraduate Curriculum, B.A. (GUELPH)

**M. Ridley**, Chief Information Officer, B.A. (GUELPH), M.A. (NEW BR.), M.L.S. (TOR.)

##### Educational Research Development Unit

**F.T. Evers**, Director, B.SC. (C'NELL), M.SC., PH.D. (IOWA STATE)

**J. Mitchell**, Manager, B.A., M.A. (GUELPH)

##### Office of the Vice-President (Alumni Affairs and Development)

**J. Shoveller**, Vice-President (Alumni Affairs and Development), B.A. (W. LAUR.), M.B.A. (IVEY)

**P. Healey**, Assistant Vice-President (Development), B.A. (GUELPH), M.B.A. (W.LAUR.)

##### Office of the Vice-President (Finance and Administration)

**N. Sullivan**, Vice-President (Finance and Administration), B.A. (MCG.)

**J. Miles**, Assistant Vice-President (Finance and Services), B.A. (WAT.), C.M.A.

**M. Harley**, Assistant Vice-President (Human Resources)

**B. Allan**, Secretary, Board of Governors, B.A. (GUELPH)

##### Office of the Vice-President (Research)

**A. Wildeman**, Vice-President (Research), B.SC., M.SC. (SASK.), PH.D. (GUELPH)

**R. McLaughlin**, Associate Vice-President (Research, Agri-Food and Partnerships), B.SC. (AGR.), PH.D. (GUELPH)

**A.J. Clarke**, Acting Associate Vice-President (Research and International Relations), B.SC., M.SC., PH.D. (WAT.)

#### Colleges and Faculties

##### College of Arts

**J. Murray**, Dean, B.A. (BR.COL.), M.A., PH.D. (TOR.)

##### College of Biological Science

**M. Emes**, Dean, B.SC., P.HD. (SHEFFIELD)

##### College of Physical and Engineering Science

**P.R. Tremaine**, Dean, B.SC. (WAT.), PH.D. (ALTA.)

##### College of Social and Applied Human Sciences

**A.E. Joseph**, Dean, B.A. (LIV.), M.A. (QU.), PH.D. (MCM.)

##### Ontario Agricultural College

**C.J. Pearson**, Dean, B.SC. (AGR.) (W.AUST.), M.SC. (GUELPH), PH.D. (MACQ.)

##### Ontario Veterinary College

**E. Stone**, Dean, D.V.M. (CALIFORNIA), M.S. (GEORGIA), M.P.P. (DUKE)

## Faculty of Graduate Studies

**I.W. Heathcote**, Dean of Graduate Studies, B.SC. (TOR.), M.S., PH.D. (YALE)

**J. Norris**, Associate Dean, B.A., M.A., PH.D. (WATERLOO).

## University of Guelph-Humber

**J. Walsh**, Vice-Provost Academic, University of Guelph-Humber, B.A. (ENG.), M.B.A., PH.D (WESTERN)

## Administrative Departments

### Alumni Affairs and Development

**J. Shoveller**, Vice President, (Alumni Affairs and Development), B.A. (W. LAUR.), M.B.A. (IVEY)

**P. Healey**, Assistant Vice-President, (Development), B.A. (GUELPH), M.B.A. (W. LAUR.)

**S. Rankin**, Director for Alumni Affairs, B.A. (GUELPH)

**R. Butler**, Director for Gift Planning, B.A. (GUELPH), B.COMM. (WIND.)

**G. Correia**, Manager, Annual Giving, B.A. (MCM.)

**K. Elton**, Manager, Donor Relations

**C. Bradshaw**, Alumni Officer, O.A.C., B.A. (GUELPH)

**M. D'Aloia**, Alumni Officer, O.V.C. Advancement, B.A. (WESTERN)

**S. Kosakowski**, Alumni Officer, C.B.S./C.P.E.S., B.SC. (H.K.), B.A. (GUELPH)

**L. Malleau**, Alumni Officer, C.S.A.H.S., B.COMM. (GUELPH)

**L. Campbell**, Senior Manager, Manager Library, B.A., M.A.

**S. Lawrenson**, Senior Manager, Student Affairs Advancement, B.Mus.(W. LAUR.)

**L. Manning**, Senior Manager, O.V.C. Advancement, B.COMM. (GUELPH)

**D. Maskens**, Senior Manager, C.O.A. Advancement, B.A., M.A. (WATERLOO)

**P. Samson**, Senior Manager, Development, O.A.C.

**K. Smart**, Senior Manager, C.B.S./C.P.E.S.

**S. Woeller**, Manager, University of Guelph-Humber Advancement, B.A. (TRENT), M.A. (CARLETON)

### Arboretum

**A. Watson**, Director, B.SC. M.SC. (GUELPH)

### Athletics

**T. Kendall**, Director of Athletics , B.A., M.A. (Alberta)

**T. Arnott**, Football Coach, B.SC. (H.K.) (GUELPH)

**G. Bullock**, Facility Supervisor - Gryphon Centre and Fields, B.PHE. (TOR.), B.ED. (TOR.), M.ED. (OISE)

**B. Clausen**, Assistant Director, (Facilities)

**D. Cox**, Wrestling Coach

**A. Fairweather**, Aquatics Program Supervisor, B.SC. (H.K.) (GUELPH), B.ED. (TOR.)

**G. Garcia**, Intramural Co-ordinator, B.SC. (LAKE SUPERIOR ST.), DIP. REC. (CAMBRIAN)

**L. Gatto**, Client Service Supervisor, B.A. (GUELPH)

**L.A. Halfpenny-Mitchell**, Administrative Services Manager and Women's Soccer Coach, B.SC. (ENG.) (GUELPH)

**S. Lawrenson**, Manager - Student Affairs Advancement, B.MUS. (LAURIER)

**K. Lee**, Dance, On Campus Manager and Interest Class Supervisor, B.P.E. (NEW. BR.), B.ED. (ST.F.X.)

**J.M. Lynch**, Assistant Sports Therapist, B.P.H.E. (TOR.), DIP. SIM (SHERIDAN), CERTIFIED

**K.W. Mason**, Men's Soccer Coach

**L. Melnick**, Intramural Program Supervisor and Women's Volleyball Coach, B.SC. (P.E.) (YORK, CAN.)

**G. Obrascovs**, Sports Therapist, DIP. ATHLETIC TRAINING & MGT. (SHERIDAN), CERTIFIED

**C.J. O'Rourke**, Men's Basketball Coach, B.A. (GUELPH)

**A. Orton**, Associate Director (Intercollegiate Programs), and Women's Basketball Coach, B.SC. (TOR.)

**J.R. Reid**, Men's Hockey Coach and Intercollegiate Supervisor

**P. Richards**, Lifestyle and Fitness Program Supervisor, B.P.H.E. (WIND.), B.E.D. (TOR.)

**D. Scott-Thomas**, Cross Country Coach, and Track and Field Coach, B.SC., M.SC. (GUELPH), B.ED (QU.), DIP. COACHING (VIC.B.C.)

**J. Slater**, Swim Coach, B.A. (LAURIER)

**M. Turley**, Sports Information Director and Field and Indoor Hockey Coach, B.A. (GUELPH)

**J. Varamo**, Manager of Marketing and Promotions, B.A. (GUELPH)

**K. Walters**, Assistant Football Coach, B.SC. (GUELPH)

**C. Wight**, Women's Hockey Coach, B.S.SC. (OTT.)

### Audit Services

**S. Nervo**, Manager, Audit Services, B.COMM. (TOR.), C.A.

**H. Huisman**, Staff Auditor, B.A. (GUELPH), C.G.A.

**C. Salemi**, Senior Auditor and Systems Auditor, B.COMM. (W. LAUR.), CMA, CISA

### Centre for Families, Work and Well-Being

**L. Hawkins**, Executive Director, B.A. (TOR.), M.A. (GUELPH)

**D.S. Lero**, Jarislowsky Chair in Families and Work, B.A. (N.Y. ST.), M.S., PH.D. (PURDUE)

### Centre for Food Security

**T.P. Phillips**, Director, B.SC. (STAN.), PH.D. (N'CLE) U.K.

### Centre for International Programs

**T.B.A.**, Director

**A.J. Clarke**, Acting Co-Director, Assistant Vice-President (Academic) and Professor, B.SC., M.SC., PH.D. (WAT.)

**C.J. McKenna**, Acting Co-Director, Associate Vice-President (Research) and Professor, B.SC. (SALF.), D.PHIL. (YORK, U.K.)

**L.A. Mitchell**, Study Abroad Manager, B.SC. (AGR.), M.SC. (GUELPH)

**L. Blenkinsop**, Education Abroad Advisor, B.SC. (GUELPH)

### Centre for Studies in Leadership

**B.M. Earn**, Director, B.A. (MANIT.), M.A., PH.D. (TOR.)

**M. Cox**, Associate Director, M.A. (W. WASH.), PH.D. (OHIO)

### Communications and Public Affairs

**C. Cunningham**, Director, B.E.S. (WAT.)

**L. Bona Hunt**, Associate Director, News Service, B.SC. (UTAH)

**B. Chance**, Editor, @Guelph, B.A. (GUELPH), M.A. (TOR.), M.A. (W.ONT.)

**R. Cooper**, News Service Officer, B.A., B.Ed. (YORK, CAN.), M.A. (W.ONT.)

**M. Dickieson**, Manager Publications, B.J. (MISSOURI)

**S. Robertson**, Manager, University Website, B.A. (YORK, CAN.)

**A. Vowles**, Staff Writer, B.SC. (GUELPH)

### Campus Community Police, Fire Prevention and Parking Services

**R. Begin**, Interim Director

**I. Weir**, Acting Manager

### Computing and Communications Services

**M. Ridley**, Chief Information Officer and Chief Librarian, B.A. (GUELPH), M.A. (NEW BR.), M.L.S. (TOR.)

**D.D. Badger**, Associate Director, University Systems, C.G.A.

**K. Bertrand**, Associate Director, Organizational Services, B.COMM. (WIND.), C.G.A.

**I. Constantin**, Manager, Business Office, Organizational Services, B.A., B.A. (A.S.E.)

**P.L. Jones**, Senior Manager, Operations, B.TECH. (LOUGH.), CERT. ED. (NOTT.)

**D. Blain**, Manager, IT Security, B.A. (WINDSOR)

**P. Briggs**, Manager, Campus Services, B.A. (GUELPH)

**J. Lennie**, Associate Director, Information Infrastructure Serices, B.A. (GUELPH)

**L. Loo**, Manager, Departmental Services, B.A. (GUELPH)

**K. Percival**, Manager, IT Development, B.SC. (ENG.), (QU.), M.SC. (GUELPH)

**K. Sprague**, Manager, Facilities Services, Organizational Services

**B. Wandschneider**, Associate Director, Information Systems Services, B.A. (QU.), M.A. (GUELPH)

**R. Ward**, Manager, Evaluation and Analysis, Organizational Services, B.SC., M.SC. (WAT.)

**A. Weller**, Manager, Personnel and Administration, Organizational Services

### Co-operative Education and Career Services

**K. Reimer**, Director, B.A. (WAT.), M.A. (GUELPH), BUS. DIP. (W.LAUR.), MERCH. DIP. (SENECA)

**J. Perry**, Assistant Director, B.A. (WIND.)

**M. Brodie**, On-Campus Co-ordinator, B.A. (GUELPH)

**J. Brydges**, Co-op Co-ordinator, B.A. (W.ONT.), DIP. ED. (MCG.)

**M. Chanda**, Co-ordinator, Career Development and On-Line Initiatives, B.A. (W.LAUR.), M.ED. (W.ONT.)

**C. Dietrich**, Co-op Co-ordinator, B.A. (WESTERN), M.A. (WAT.)

**J. Ferguson**, Co-ordinator, Educational Planning & Job Search, B.A. (GUELPH)

**S. Gallina**, Co-op Co-ordinator, B.A. (GUELPH)

**S. Goody**, Co-op Co-ordinator, B.A. (GUELPH)

**A. Kramer**, Co-op Co-ordinator, B.SC. (WAT.)  
**L. McCreery**, Co-ordinator, Career Planning, B.A. (YORK, CAN.), M.SC. (GUELPH)  
**S. Nuttley**, Office Systems Manager  
**C. O'Brien**, Marketing Co-ordinator, Liaison and Promotions, B.A. (GUELPH), DIP. JOURNALISM (CONESTOGA)  
**B. Pires**, Co-ordinator, Employer Development and Events, B.A. (GUELPH.), Dip. Research Analysis (GEORGIAN)  
**S. Popkey**, Co-op Co-ordinator, B.A. (GUELPH)  
**C. Steele**, Co-ordinator, Employer Development and Events  
**I. Wallace**, Co-op Co-ordinator, B.A. (W.LAUR.)  
**B. Wilson**, Co-op Co-ordinator, B.A. (WAT.)

### Environmental Health and Safety

**C.A. White**, Director, Environmental Health and Safety, B.SC., PH.D. (CARLETON)  
**D. Barillari**, Radiation Safety Officer, B.A.SC., M.ASC. (TOR.), PH.D. (MANITOBA)  
**C. Cooper**, Industrial/Agricultural Safety Officer, RVT.  
**C. McNeill**, Facilities Safety Officer, B.SC. (QUEEN'S), M.ENG. (TOR.), CIH, ROH  
**J. Minogue**, Biosafety Officer, B.SC. (VA TECH), M.S.P.H. (CHAPEL HILL)  
**D. Persaud**, Occupational Hygiene Safety Officer, B.A. (YORK), B.A.SC. (TOR.), B.ED. (BROCK)  
**J. Wesley**, Laboratory Safety Officer, B.SC., M.SC. (GUELPH)

### Hospitality Services

**D. Boeckner**, Director, Hospitality Services  
**A. Virani**, Assistant Director, Management Information Systems  
**K. Zinken**, Assistant Director, Finance  
**P. Clark**, Department Head, Food Service Operations  
**W. McFadden**, Department Head, Retail Services  
**S. Willms**, Department Head, Community Services

### Physical Resources

**R.J. Carter**, Executive Director, Physical Resources, M.A.SC., P.ENG.  
**D. MacLachlan**, Director, Facilities and Energy Services, P.ENG.  
**A. Fagan**, Assistant Director, Finance and Administration  
**J.C. Pickard**, Director, Planning, Engineering and Construction, B.ARCH. (O.A.A.)  
**P.D. Specht**, Director, Maintenance and Operations, P.ENG. (R.M.C.)

### Financial Services

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# Glossary

## Academic Evaluation

The Academic Evaluation Report is a report of a student's academic progress towards the completion of a specified program and specialization.

## Academic Sanction

Academic sanction is the penalty applied to students who fail to make payment, or suitable arrangements for payment, of their University account. Students on academic sanction may not receive semester examination results or official transcripts; may not receive clearance to graduate; and/or may not be allowed to register for a subsequent semester.

## Academic Session

See Academic Term.

## Academic Term

An academic term is an independent academic period of 15 weeks, half of an academic year. Also referred to as a semester (see definition below).

## Academic Year

An academic year is two semesters; undergraduate traditionally classified as first year (freshman), second year (sophomore), third year (junior), or fourth year (senior). Under the semester system this classification has less meaning than under a whole year system but is occasionally used to indicate the level at which a student has arrived.

## Add Period

The add period takes place at the beginning of the semester where students are permitted to add courses for the current semester.

## Assigned Grade

An assigned grade is a numerical grade based on the instructor's recommendation and granted at the discretion of the Program Committee to students who have not completed course requirements.

## Audit

An audit is registration in a course for which degree or diploma credit is not sought. Audited courses are not reported on the official transcript or academic record.

## Baccalaureate

Baccalaureate refers to an undergraduate degree awarded by the University upon successful completion of the requirements of a program.

## Class Days

Class days are used to express deadlines. Class days are calculated from the start of the regular class schedule. (See Schedule of Dates).

## Class Level

Class level is a determination of a student's progression in an academic program by credit weights with increments of 2.50.

## Clearance to Graduate

Clearance to graduate denotes that an applicant for graduation has satisfied all program requirements and is recommended for graduation.

## Compassionate Grounds

Compassionate grounds are reasons of a serious personal nature which, subject to the approval of a committee or authorized person, justifies a variation of the rules in the case of a particular student.

## Concurrent Course

A concurrent course must be taken concurrently with (if not taken prior to) another specified course.

## Core course

A core course is one which is listed in a schedule of studies in the Undergraduate Calendar and identified as being a required course for a program.

## Corequisite

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 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.

## 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 not register in particular courses. The course may be restricted because there is sufficient over-lap 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.

## 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 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 its colleges at Alfred, Kemptville, and Ridgeway. Sometimes called the Diploma Catalogue or Bulletin.

## Double-weighted Course

A double-weighted course is a course that is taken in 1 semester, but counts as 2 course attempts for classification, continuation of study and calculation of fees. A double weighted course cannot be split. **Note valid for Academic Terms after Winter 1999.**

## 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.

The drop period for two semester courses starts at the beginning of the add period in the first semester and extends to the last day of the add period in the second semester. See Two-Semester Courses.

## 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.

## Instructor Notification

Courses that are declared instructor notification on the course outline require departmental approval to be dropped.

## Mailing Address

The mailing address is a temporary address used for mailing if one is recorded; otherwise the home address is used.

## 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 various levels of concentration of study within a degree program, including programs without specialization. Schedules of studies are completed within a specific degree program and must normally be declared by the start of semester 3. Students need to be aware that progress within a program and graduation with a degree from that program depends upon a) the degree program requirements, and b) the requirements for the declared schedule of studies.

## 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.

## Semester Average

Semester Average is calculated by dividing the weighted course total by the total credit attempts in the semester.

## 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.

## Summer Session

Summer Session is scheduled during May, June.

## Supplemental Privilege

Supplemental privileges are granted at the discretion of the Program Committee, 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.

## 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 06-07 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 1, 2006

Initial publication of the 2006-2007 Undergraduate Calendar.

## March 14, 2006

This second publication includes the following revision:

### Chapter X - Degree Programs - D.V.M. - Program Information - Failed Courses

Amendment to the D.V.M. Continuation of Study Policy on Failed Courses.

## August 22, 2006

This third publicaion includes the following revisions:

### Chapter IX - Scholarships and Other Awards

**NEW AWARDS:** Parks Canada & TIAC Sustainable Tourism SCHOLARSHIP  
Cameron Hawkins and Associates SCHOLARSHIP University of Guelph Retiree Association Degree Scholarsip University of Guelph Retiree Association Diploma Scholarsip Michael DiGirolamo SCHOLARSHIP Guelph and Wellington County Master Gardeners SCHOLARSHIP Greater Toronto Hotel AScholarshipociation SCHOLARSHIP William A. Brechin SCHOLARSHIP Charles and Betty Webster International Study SCHOLARSHIP Ruth and Eber Pollard SCHOLARSHIP in Canadian History International Undergraduate SCHOLARSHIP Quinn Memorial SCHOLARSHIP Class of Mac '65 SCHOLARSHIP Gonder Family SCHOLARSHIP William Furlong SCHOLARSHIP in Microeconomics J. Ross Cavers Semester Abroad SCHOLARSHIP Geography Field Trip Travel Grant OAC '49 BBRM Entrance SCHOLARSHIP OAC '54 International Study SCHOLARSHIP Jakob Amstutz Prize Ron Scriver Memorial Bursary Aeroplan International Travel Grant Agnis Varis Scholarship in Women's Studies Priscilla and Stanford Reid Trust Prize Invisible Fence Canine Behaviour & Training Scholarship Fisher Scientific Scholarship in Biochemistry Human Health & Nutritional Sciences Travel Grant J.D. Cunningham Travel Grant Jim MacKenzie Scholarship BSI Management Systems Canada Scholarship D & G Hart Travel Grant James L. Hunt Scholarship Helen Mahon Memorial Bursary Ron Scriver Memorial Bursary

**REVISED AWARDS:** John T. Powell Scholarships Kennneth James Berg Memorial Scholarships Roche Prize in Molecular Biology and Genetics Mrs. Elsa Hevenor Stewart Bursaries Honours Biochemistry Scholarship Society of Chemical Industry Prize in Biochemistry Analytical Biochemistry Scholarships Chemical Institute of Canada Prize Class of Mac '65 Scholarship

**CANCELLED AWARDS:** Babock & Wilcox Design Four Seasons Hotels Entrance Scholarships Pacific Regeneration Technologies (PRT) Scholarship International Flavours and Fragrances (Canada) Ltd. Scholarship Wellington Laboratories Prize in Environmental Chemistry

## January 23, 2007

The fourth publication includes the following revision:

### Chapter IX - Scholarships and Other Awards

The Lincoln Alexander Chancellor's Scholarship and the President's Scholarship.