2015-2016 Undergraduate Calendar

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2015-2016 academic year, including the Summer Semester 2015, the Fall Semester 2015 and the Winter Semester 2016.

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

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

The University is a full member of:

• The Association of Universities and Colleges of Canada

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Disclaimer

University of Guelph 2015

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2015-2016 academic year, including the Summer Semester 2015, the Fall Semester 2015 and the Winter Semester 2016.

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

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

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

Published by: Enrolment Services

Introduction

Collection, Use and Disclosure of Personal Information

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

Statistics Canada - Notification of Disclosure

For further information, please see Statistics Canada's web site at http://www.statcan.ca and Section XIV Statistics Canada.

Address for University Communication

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

Email Address

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

Home Address

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

Name Changes

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

Student Confidentiality and Release of Student Information Policy Excerpt

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

 $Complete \ policy \ at \ \underline{https://uoguelph.civicweb.net/document/68892/ORSInfoReleasePolicy060610.pdf?} handle=FF982F8A9AEA4076BE4F3D88147172B8.$

Learning Outcomes

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

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

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

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

1. Critical and Creative Thinking

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

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

2. Literacy

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

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

3. Global Understanding:

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

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

4. Communicating

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

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

5. Professional and Ethical Behaviour

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

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

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GEOG*2030

POLS*2250

POLS*3320

UNIV*3000

Diversity & Power:

ANTH*3670

PHIL*2120

PSYC*3300

SOAN*2290

SOAN*3240

FARE*1300

GEOG*3320

HIST*2040

ENVS*2120

POLS*2080

SOC*3380

World Issues:

SOC*2390

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

Ethics

Environment and Development

Politics of Aid & Development

The Psychology of Gender

Gender & Global Inequality I

Class and Stratification Identities and Cultural Diversity

Poverty, Food & Hunger

War and Society

Society and Nature

Public Administration and Governance

Civic Engagement & Service Learning

Food Systems: Issues in Security and Sustainability

Introduction to Environmental Stewardship

Development and Underdevelopment

Indigenous Peoples: Global Context

XI. Special Study Opportunities

Certificates and Diplomas

The University offers certificate and diploma programs in Applied Statistics, Business, Communication Process, Environmental Citizenship, Environmental Conservation, Food Science, Hospitality Studies, Leadership, Public Policy and Administration and Scottish Studies. 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. Students currently registered in a degree program or intending to transfer into a degree program should note double-counting regulations. Up to 50% of the requirements for a degree-credit certificate/diploma may be applied toward a major, minor or area of emphasis. The remaining 50% of the certificate/diploma requirements may be applied to electives provided the specific courses in the certificate/diploma meet degree program requirements. For more information on double-counting regulations, undergraduate students should consult with the Program Counsellor for the degree program they seek to complete. Note that the Certificate in Leadership is exempt from this restriction.

For more information on the certificates, please consult with the Open Learning program Counsellor at Open Learning and Educational Support (ext. 56050).

Certificate in Business

The Certificate in Business is designed to be beneficial to those who are not enrolled in a business program, but wish to gain knowledge of business concepts. It provides participants with opportunities to develop the professional skills essential for success in business environments. The functional areas of business are introduced in required courses. Participants may customize their learning through their choice of electives by either focusing on one particular subject area or selecting from different subject areas for more breadth. The Certificate in Business, available to both undergraduate students and open learners, is offered by the University of Guelph through the College of Business and Economics.

Required Course

MGMT*2150 [0.50] Introduction to Canadian Business Management *

Restricted Electives

2.00	1:4	c
2.00	credit	rrom:

	diodic ironin		
	ACCT*2220	[0.50]	Financial Accounting
	ACCT*2230	[0.50]	Management Accounting
	BUS*2090	[0.50]	Individuals and Groups in Organizations
	ECON*1050	[0.50]	Introductory Microeconomics
	ECON*1100	[0.50]	Introductory Macroeconomics
	ECON*2200	[0.50]	Industrial Relations
	EDRD*3140	[0.50]	Organizational Communication
	ENGG*3240	[0.50]	Engineering Economics
	FARE*3310	[0.50]	Operations Management
	MCS*1000	[0.50]	Introductory Marketing
	MCS*2020	[0.50]	Marketing Information Management
	MCS*2100	[0.50]	Personal Financial Management
	MCS*3000	[0.50]	Advanced Marketing
	POLS*3470	[0.50]	Business-Government Relations in Canada
As p	part of the 2.00 credi	t restricted	electives students may select one of:

FREN*3530 [0.50] Business French HISP*3530 [0.50] Business Spanish

Certificate in Civic Engagement and Global Citizenship

The value of combining a sense of self as a global citizen with the dynamic nature of civic engagement can result in a practical, informed and hopeful approach to addressing complex local and global problems shaped by different cultures, political systems and environments. The certificate in Civic Engagement and Global Citizenship aims provide students with a critical understanding and awareness of the complexity of world and the value of their disciplines as contributing to interdisciplinary approaches to solving problems. Students will explore how the diversity of people and privilege in the world contributes to both problems and solutions while having an opportunity to reflect upon their own place and privilege. They will develop the knowledge, skills, and values required to develop a sense of themselves as empowered citizens and community members who can undertake thoughtful, respectful and creative action for better communities at home and abroad.

Required Courses

UNIV*2410	[0.50]	Engaged Global Citizenship
UNIV*4410	[0.50]	Civic Engagement with Communities

Restricted Electives

0.50 credits from each of the following three areas:

Community Engagement & Politics

EDRD*3400 [0.50] Sustainable Communities

Certificate in C Practice	Commur	nication Process: Bridging Theory and
The five-course on participants' knowle human resource mar criminology, and int This program focus signs and symbols, individuals, groups,	dge, attitu nagement, ternational es on facil as it rela organizat	ificate in Communication Process sets out to enhance des and skills necessary for successful careers in business, education, medical and veterinary professions, social work, development. litating knowledge-sharing through verbal and non-verbal ates to units of different size and complexity - among ions, nations and regions of the world. By gaining insight rocesses, participants will be better equipped to effectively
		rocesses, participants will be better equipped to effectively y evolving environment.
The Certificate in Coopen learners, is offer	ommunica ered onlin	ation Process, available to both undergraduate students and e through University of Guelph's School of Environmental ant, and is structured as follows:
Required Cour	ses	
EDRD*2020*DE EDRD*3120*DE EDRD*3140*DE EDRD*3160*DE EDRD*4120*DE For more information Certificate in EDeveloped from a swant to learn more and Participants gain in-and how one can disconsists of six degree	[0.50] [0.50] [0.50] [0.50] [0.50] on, visit the Cnvirona ocial scient bout the gl depth kno rectly con-	Interpersonal Communication Educational Communication Organizational Communication International Communication Leadership Development in Small Organizations e website at: http://www.communicationprocess.ca/ mental Citizenship nee perspective, this Certificate is beneficial to those who lobal environmental issues facing us today and in the future. weledge about environmental changes, their global impact, tribute to the environment's sustainability. The Certificate istance education courses taken online from the University mental Sciences. It is structured as follows, requiring six
		st two at the 3000 or 4000 level:
Required Cour	se	
ENVS*2070*DE	[0.50]	Environmental Perspectives and Human Choices
2 or 3 of the follow	ing:	-
BOT*2000*DE	[0.50]	Plants, Biology and People
ECON*1050*DE	F 3	Introductory Microeconomics
ECON*2100*DE EDRD*3500*DE		Economic Growth and Environmental Quality Recreation and Tourism Planning
EDRD*3500*DE		Planning Industrial Ecology: Design for Sustainability
ENVS*2120*DE		Introduction to Environmental Stewardship
GEOG*1220*DE		Human Impact on the Environment

Environment and History

Philosophy of the Environment

Humans in the Natural World

Watershed Planning Practice

Environment and Resources

Tourism and Environment

Global Environmental Change

Plants and Human Use

Nature Interpretation

please

Ecology

Environmental Politics and Governance

Tourism Planning in the Less Developed World

Management of the Biophysical Environment

the

website

HIST*2250*DE

PHIL*2070*DE

POLS*3370*DE

BIOL*1500*DE

BIOL*2060*DE

BOT*1200*DE

EDRD*4010*DE

ENVS*3000*DE

GEOG*2210*DE

GEOG*3020*DE

GEOG*3210*DE

GEOG*3490*DE

more

EDRD*3450*DE [0.50]

2 or 3 of the following:

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

[0.50]

http://www.environmentalcertificates.com.

information,

^{*} Note: Students registered in B.COMM. or in the Business Administration minor or Marketing Management minor or in the BA European Studies program with an emphasis in European Business are not eligible for the Certificate.

Certificate in Environmental Conservation

Developed from a biophysical science perspective, this Certificate is beneficial to those who want to gain knowledge of issues surrounding environmental protection, conservation and preservation, and environmental research. The Certificate consists of six degree-credit distance education courses taken online from the University of Guelph's School of Environmental Sciences. The program is designed to provide participants with the credentials they need for professional advancement in the environment industry and/or personal enrichment. It is structured as follows, requiring six courses total, to include at least two at the 3000 or 4000 level:

Required Course

ENVS*2120*DE [0	.50] Int	troduction to Environmental Stewardship	
2 or 3 of the followin	g:	•	
EDRD*3450*DE	[0.50]	Watershed Planning Practice	
GEOG*1220*DE	[0.50]	Human Impact on the Environment	
GEOG*1300*DE	[0.50]	Introduction to the Biophysical Environment	
ENVS*1060*DE	[0.50]	Principles of Geology	
ENVS*2250*DE	[0.50]	Geology of Natural Disasters	
ENVS*2060*DE	[0.50]	Soil Science	
ENVS*3080*DE	[0.50]	Soil and Water Conservation	
2 or 3 of the followin	g:		
BIOL*2060*DE	[0.50]	Ecology	
BIOL*3450*DE	[0.50]	Introduction to Aquatic Environments	
ENVS*3000*DE	[0.50]	Nature Interpretation	
ENVS*3040*DE	[0.50]	Natural Chemicals in the Environment	
GEOG*2210*DE	[0.50]	Environment and Resources	
GEOG*3020*DE	[0.50]	Global Environmental Change	
GEOG*3210*DE	[0.50]	Management of the Biophysical Environment	
For more in	formatio	n, please visit the website at:	
http://www.environmentalcertificates.com.			

Certificate in Food Science

The Certificate in Food Science program is offered by the Department of Food Science to University of Guelph undergraduate students or online to Open Learning program students. It concentrates on the chemistry, analysis, microbiology and processing of foods, and on the maintenance of food safety and quality throughout. The Food Science certificate program provides recognition for food science education for University of Guelph students not in the B.Sc. Food Science Major and for individuals outside of the University of Guelph interested in the field of Food Science. Post-secondary courses in microbiology and chemistry are prerequisites for entrance into the program.

In-course students can select courses and when completed apply for the certificate through the Open Learning and Educational Support office (note the double-counting rule under XI. Special Study Opportunities, Certificates and Diplomas). Individuals from outside the University of Guelph should register for courses through the Open Learning and Educational Support office.

The DE courses of the program cannot be used as substitutes for core courses or restricted electives in the B.Sc. Food Science Major.

Required Courses

FOOD*2010*DE or FOOD*2150 FOOD*2410*DE or FOOD*3160 FOOD*3430*DE or FOOD*4190 1 of: FOOD*2400*DE [0.50] Introduction to Food Chemistry FOOD*3030 [0.50] Food Chemistry I FOOD*3050 [0.50]Food Chemistry I 1 of: FOOD*2420*DE [0.50] Introduction to Food Microbiology FOOD*3230 Food Microbiology [0.751]FOOD*3240 [0.50]Food Microbiology

Certificate in Hospitality Studies

The Certificate in Hospitality Studies is offered online from the University of Guelph's School of Hospitality, Food and Tourism Management, College of Business and Economics. It is comprised of five courses taken via distance education and is designed to provide an overview of the hospitality industry, an understanding of human resources management principles and financial management skills. It is perfect for individuals needing additional formal education to assume greater management responsibilities.

For more information, please visit the website at: http://www.foodsciencecertificate.com.

The Certificate requires the five courses listed below:

Required Courses

[0.50]	Management Accounting
[0.50]	Individuals and Groups in Organizations
[0.50]	Human Resources Management
[0.50]	Control Systems in the Hospitality Industry
[0.50]	Introduction to Canadian Business Management
	[0.50] [0.50] [0.50]

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 College of Business and Economics. This certificate program allows undergraduate students to complete both their degree program and the certificate concurrently. As well, the certificate is available to students in the Open Learning program.

The program focuses on new leadership models and practical applications in a variety of organizational settings. 2.50 credits are required in addition to 120 hours of leadership practice. Students will develop an historical and theoretical understanding of leadership with particular emphasis on contemporary theories, models and research.

For more information, please visit the website at: http://www.leadershipcertificate.com/

Foundations of Leadership

Leadership Certificate Capstone

Advanced Topics In Leadership and Organizational

Evidence-Based People Management

Required

HROB*4030

HROB*4100

[0.50]

[1.00]

HROB*2010*DE [0.50]

HROB*4010*DE [0.50]

Ethics Course	Require	ment (Select 0.50 credits)
PHIL*2120	[0.50]	Ethics
PHIL*2600	[0.50]	Business and Professional Ethics
POLS*3440	[0.50]	Corruption, Scandal and Political Ethics
Electives (Sele	ct 1.00 c	redits)
BUS*2090	[0.50]	Individuals and Groups in Organizations
BUS*3000	[0.50]	Human Resources Management
EDRD*3140	[0.50]	Organizational Communication
EDRD*3160	[0.50]	International Communication
EDRD*4120	[0.50]	Leadership Development in Small Organizations
HROB*2100	[1.00]	Managing People in Organizations

MGMT*2150	[0.50]	Introduction to Canadian Business Management [B.Comm
		students may not take this course for credit in their degree
		program.]
PHIL*2100	[0.50]	Critical Thinking
POLS*2250	[0.50]	Public Administration and Governance

PHIL*2100 [0.50] Critical Thinking
POLS*2250 [0.50] Public Administration and Governance
PSYC*3070 [0.50] Psychology in Human Resource Management
PSYC*3080 [0.50] Organizational Psychology
The selection and approval of the 120 hours of leadership practice takes place during

Management

HROB*2010 (Foundations of Leadership). For more information, please visit the website at: http://www.leadershipcertificate.com

Note: Students enrolled in the Leadership and Organizational Management major are not eligible for this certificate.

Certificate in Public Policy and Administration

The five-course Certificate in Public Policy and Administration is designed to provide a solid base in key concepts and foundations of Canadian government, policy and administration by bringing together a number of Canadian political science and public policy courses. This certificate will be of interest to individuals currently working or seeking employment in the public sector or quasi-public sector as well as undergraduate students. All six courses in this certificate are also available in distance education format and to earn the Certificate, students will be required to successfully complete five of the six courses (2.50 credits) as follows:

Required Courses

_		
POLS*1400*DE	[0.50]	Issues in Canadian Politics
POLS*2250*DE	[0.50]	Public Administration and Governance
3 of the following	4 courses:	
POLS*2300*DE	E [0.50]	Canadian Government and Politics
POLS*3250*DI	E [0.50]	Public Policy: Challenges and Prospects
POLS*3370*DE	E [0.50]	Environmental Politics and Governance
POLS*3440*DF	E [0.50]	Corruption, Scandal and Political Ethics

Students who wish to enrol in the Certificate in Public Policy and Administration should contact the Open Learning program Counsellor at Open Learning and Educational Support (ext. 56050.)

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

Co-operative Education

Co-operative Education (Co-op), delivered in concert with employer partners, constitutes part of the student's formal education and is available in over 35 majors for students. A form of work integrated learning, Co-op is a model of education that integrates a student's academic learning with periods of paid workplace learning in fields relevant to the student's academic and personal/professional goals. The academic and work schedules will vary with degree program and major. The first co-op work term is scheduled after the third or fourth academic semester, providing an academic foundation on which to build the work experience.

Each work term is developed in collaboration with the employer and is approved by the institution as a suitable learning environment. Students participate in a competitive employment process to secure an approved co-op work term that is relevant to the student's area of academic study. COOP*1100 – Introduction to Co-operative Education, a mandatory, non-credit course, is a prerequisite for the first work term and prepares the student for the employment process.

The student's performance in the workplace is supervised and evaluated by the student's employer using the Work Performance Evaluation tool. The student's progress during the work term is also monitored by Co-operative Education & Career Services, including an official site visit during the co-op work term and a review of the student's official Learning Goals. A Co-op Work Term Report is required for each work term and is graded by an assigned Co-op Faculty Advisor. All evaluation grades will appear on the student's official transcript.

The University of Guelph Co-operative Education program is accredited by the Canadian Association for Co-operative Education (CAFCE), therefore standardized guidelines regarding co-op work terms will be followed at all times.

Course requirements and academic/work sequences for specific majors are listed under the appropriate degree program in Section X--Degree Programs

Co-operative Education & Career Services (CECS) supports, trains and leads students and alumni as they make career and further education planning decisions. Successful students connect with CECS early in their academic career and take full advantage of the career planning and job search services offered. CECS will help students to discern "what to do with their degree". As well, the CECS job posting service, Recruit Guelph, provides online job postings including full-time, part-time, contract, seasonal, summer and internships. Job & Career Fairs and employer networking events also provide exposure to the working world. Please refer towww.recruitguelph.ca for more information.

Co-operative Education Guidelines and Procedures

The following guidelines and procedures support the implementation of the "<u>Policy on Co-operative Education Programming in Undergraduate Degree Programs</u>", approved by Senate on June 4, 2012. In the event of a discrepancy between the Policy and these Guidelines, the Policy will apply.

The following definitions shall apply in these guidelines and procedures:

- "Co-operative Education" is defined by the University of Guelph as a collaborative partnership between the University and workplace employers who share a commitment to the learning objectives and outcomes of the co-operative education program as expressed through experiential education opportunities and the integration of workplace and academic learning.
- "Co-op Program" (Co-operative Education Programming): Co-op education programming is offered in two distinct formats, as defined by CAFCE:
 - i. "Co-op Option" (Co-operative Education Option): A co-op option may be offered within an established degree program and major. The Schedule of Studies includes semesters of academic study sequenced with semesters of on-site approved paid work terms.

- ii. "Co-op Internship" (Co-operative Education Internship) is defined as an on-site approved paid work experiences, normally 12 to 16 months in length commencing once 50% of the academic program is completed.
- "CECS" means the Co-operative Education & Career Services department at the University of Guelph. CECS is the unit designated to coordinate and support co-operative education programming by providing administrative assistance to co-op students, co-op employers, and co-op faculty advisors.
- "Co-op Co-ordinator" means the staff person assigned by CECS to provide support
 for a co-op education program through securing appropriate work term opportunities,
 providing orientation, advice and guidance to co-op students, and, in partnership with
 the Co-op Employer, monitoring student progress over the co-op work term.
- "Co-op Work Term" is defined as the designated period of time that a co-op student is engaged in an on-site approved paid work experience.
- "Co-op Employer" means the designated supervisor of a student who is participating in a co-op work term.
- "Work Term Report" is a report written by the co-op student following the completion of a Co-op Work Term and submitted to the Co-op Faculty Advisor for evaluation.
- "Work Term Performance Evaluation" is the formal evaluation of the student by the Co-op employer upon completion of the Co-op Work Term.
- "Co-op Faculty Advisor" is defined as the faculty member assigned by the department
 or school to provide academic advice and guidance to students enrolled in the co-op
 program, provide advice and guidelines on the development of the student's Work
 Term Report, and evaluates the student's Work Term Report.
- "Co-op Certification" is the official recognition of a co-op student's satisfactory completion of all co-operative education requirements and graduation of their program, whereby they are awarded a co-operative education certificate.

Guidelines for the Establishment of Co-op Programs:

Co-operative Education Options shall be established according to the criteria listed under section 6.2 of the Policy on Co-operative Education Programming in Undergraduate Degree Programs at the University of Guelph. The roles and responsibilities of the co-operative education program partners are outlined under the Co-operative Education Programs in Chapter 10 Degree Programs.

Schedule of Studies

- a. Every Co-op Option Schedule of Studies shall include the following features:
 - A minimum of three Co-op Work Terms to a maximum of five Co-op Work Terms shall be sequenced within the Schedule of Studies;
 - At least one Co-op Work Term shall occur in each of the Summer, Fall, and Winter semesters:
 - No more than two Co-op Work Terms shall commence in a Summer semester;
 - The first Co-op Work Term shall be scheduled no sooner than the second Winter semester of the program;
 - No more than five full-time academic semesters shall be completed before the first Co-op Work Term;
 - The Co-op Schedule of Studies shall not finish with a Co-op Work Term semester;
 - The Schedule of Studies for a Co-op Option shall not exceed eight academic semesters, a schedule that is no longer than five years;
 - At least thirty percent of the Schedule of Studies for the Co-op Option shall be comprised of semesters in Work Terms;
 - It is the responsibility of the academic department in conjunction with CECS to design the Co-op Option Schedule of Studies taking into account that sufficient and appropriate courses are offered in the academic semesters on campus so that Co-op students are available year-round to employers participating in the program.

b. Co-op Internships:

- Co-op Internships normally commence once 50% of the academic program is complete and are 12 to 16 months in length.
- c. The work term requirements:
 - Each work term is developed and/or approved by CECS as a suitable learning opportunity;
 - The student is engaged in productive work rather than merely observing;
 - The student receives remuneration for the work performed;
 - Work term opportunities without traditional remuneration must be approved by CECS;
 - The student's progress on the work term is monitored by CECS;
 - The student's performance on the job is supervised and formally evaluated by the student's co-operative employer;
 - Student's must complete a work term report and satisfactorily pass the academic requirements governing this assessment.

Admissions

- a. Normally the minimum admission average required for students to be considered for admission to a Co-op Option is 80%. Exact cut-offs are determined on the basis on the quantity and quality of applications received and the number of places available in the program. Students not admitted to co-op will be automatically considered for the regular program. The number of admission offers to the Co-op Option will depend upon the capacity determined each year by the Co-operative Program Co-ordinating Committee.
- b. University of Guelph students and external students to the University may be admitted for transfer to a Co-op Option if there is capacity available in the specified program. The minimum admissions average for internal transfer is 70% cumulative average in the first two full time semesters. Other conditions and application deadlines may apply. Students should consult the Program Counsellor for information on internal transfer.

Continuation of Study

- a. It is mandatory that co-op students be registered full-time for the duration of their program as outlined in the schedule of studies listed in the Undergraduate Calendar.
- b. Students are required to meet a continuation requirement at the end of semester two. Students will be allowed to continue in the co-op program only if their cumulative average is 70% or higher after their first two full-time academic semesters.
- c. Students are required to complete and pass the mandatory Introduction to Co-operative Education (COOP *1100) non-credit course as the pre-requisite for the first employment process.
- d. Students are required to follow the academic and work sequence as outlined in the Undergraduate Calendar.
- e. Students who receive a Marginal work performance evaluation will be required to meet with their Co-op Co-ordinator. Students who receive two Marginal work performance evaluations will be withdrawn from co-op and transferred to the regular academic program. The grade as well as the phrase "Req to Withdraw from Co-op" will appear on the Official Transcript.
- f. A student who receives an Unsatisfactory work term report will be required to withdraw from co-op. The grade as well as the phrase "Req to Withdraw from Co-op" will appear on the Official Transcript.
- g. A student who does not complete and submit the Work Term Report by the 5th class day of the next semester may not register in the following work term.
- h. A student on academic probation shall not be eligible to participate in the Work Term process and will not be eligible to commence a Co-op Work Term.
- The co-op employment process is competitive and while CECS makes every effort to assist students in gaining employment, there is no guarantee that every student will become employed through the employment process.

Graduation Requirements

Students are eligible to graduate with the "Co-op Certification" if they meet the following conditions:

- a. Meet the academic conditions for graduation for their degree program as outlined in the Undergraduate Calendar.
- b. Receive evaluations of "Good" or higher in all but one of the Work Performance Evaluations.
- c. Receive evaluations of "Satisfactory" or higher in all Work Report Evaluations.

Students wanting to graduate with less than the required number of work terms must contact their Co-op Co-ordinator with the request and it will be brought to the Director CECS for final approval.

Students who do not achieve the requirements for continuation of study or graduation in the co-op program may appeal the decision (see Chapter VIII, Academic Consideration).

Roles and Responsibilities of Co-operative Education Program Partners

The University of Guelph's co-operative education program requires a collaborative approach that engages all partners in the process. The success of the co-op programs at Guelph is dependent upon a commitment by all the partners involved.

Students

Student success in a co-op option requires commitment, students are required to read and understand the Policy Agreement for Undergraduate Student Involvement in Co-operative Education.

There is no guarantee that all students enrolled in co-op will have a work term. They must take responsibility for the employment process. This includes:

- Meeting the co-op continuation of study requirements;
- Successfully completing the COOP*1100 preparatory course; and,
- Understanding the competitiveness of the co-op application process and their responsibilities within the process.

Students must also take responsibility for success in the workplace. As such, students

- Adequately prepare for the work term and represent themselves and the University in the workplace;
- Set learning goals with the supervisor early in the term and work toward achieving those goals;
- Request a formal performance evaluation at the end of the term;
- Prepare a work term report for the Co-op Faculty Advisor;
- Successfully complete the requirements of the work terms; and
- · Inform CECS on matters affecting their status.

The Academic Department

The Academic Department is responsible for all academic components of the co-op program including the offering of courses to support the co-op option and the evaluation of the co-op work term report. A Co-op Faculty Advisor is provided for each co-op program.

The role of the Co-op Faculty Advisor is to support the student on the academic requirements of the program. The responsibilities of the Co-op Faculty Advisor are to:

- Assist students in academic/work sequences and course selection;
- Provide detailed guidelines on the writing and marking of work term reports;
- Advise the student of appropriate work term report topics, supporting the process, grading of the work report and follow-up discussion with the student; and
- Undertake administrative tasks in support of the educational program, including management of the unit's co-op program, supporting the development of materials about the program (where required), and establishing procedures for the co-op option within the department.

Co-operative Education & Career Services (CECS)

The role of CECS is to support all of the administrative functions related to the work term experience. Responsibilities of CECS include:

- Following the required operational guidelines as an accredited program of the Canadian Association for Co-operative Education (CAFCE);
- · Preparing students for the co-op experience;
- Co-ordinating job development relevant to the academic curriculum and facilitating the employment process;
- Ensuring the quality of the job development effort;
- Providing all the administrative support required for the smooth functioning of the university's co-operative education program;
- Operating the competitive employment processes including co-op interviews and employer information sessions, panels and informational interviews; Maintaining all employer, department and student data;
- Processing all clerical and administrative matters relating to the relationship between employer and institution;
- Building employer relationships and provide students with a range of suitable employment opportunities, and working closely in conjunction with the academic unit and Alumni Affairs and Development;
- Offering the COOP *1100 Introduction to Co-operative Education course the semester prior to the student employment process;
- Providing student support for resume, cover letter and interview preparation as well as career guidance where needed;
- Ensuring that the employer maintains the appropriate educational quality in the work term experience provided to the student;
- Working with the Registrar to ensure a reasonable number of students are admitted into the program;
- Ensuring that the academic/work program schedules provide year round availability
 of work terms to meet employer needs; and
- Assigning Co-op Co-ordinators to co-operative education options.

Co-op Co-ordinator

The role of the Co-op Co-ordinator is to work within specific programs to support the work-term process. Responsibilities of the Co-op Co-ordinator are to:

- Develop jobs in specific discipline areas;
- Advise students in regard to their activities in the employment process and on the work term:
- Market the co-op program to employers and obtaining work term commitments;
- Prepare co-op students for their involvement in co-operative education, and educate students concerning employer and performance expectations;
- Actively monitor the work term maintaining contact with the student during the work term:
- Be available any time during the work term to respond to student or employer inquiries;
- Conduct a work term site visit with the student and supervisor;
- Conduct pre- and post-work term student advisement and debriefing;
- Manage the student's file and ensuring complete institutional records on each student;

- · Undertake administrative tasks in support of the co-op program, including consultation with academic units on their co-op offering, consultation with Co-op Faculty Advisor on policy and procedure aspects of the program; and
- · Approve special situations where students may complete a work term without traditional remuneration.

Co-op Program Coordinating Committee (CPCC)

The role of the CPCC is to provide administrative oversight and advice as it relates to the University's co-op programs. Responsibilities of CPCC include:

- Ensure that all co-op programs conform to the established policy and standard practices:
- · Co-ordinate co-op option schedule of studies to support the maximum availability of students in all three semesters;
- Review new program proposals to confirm that sufficient resources are available to mount a quality co-op program, including the assignment of a Co-op Coordinator and Co-op Faculty Advisor for each stream; and
- Monitor co-op programs to support high quality program delivery.

Good quality employers who understand the educational focus of the co-op programs are critical to the program. Responsibilities of the employer are to:

- Provide co-op work term job opportunities that meet the university's educational
- Provide the university with an accurate job description along with any available company information:
- · Conduct interviews and select the best candidate;
- · Pay competitive wages in accordance with the student's work term level and academic level;
- Provide safe employment including WSIB and liability insurance coverage for the duration of the employment period; and
- · Comply with the Provincial Employment Standards Act.

During the work term:

- · Orient the student to the organization, workplace protocols and the job during the first few weeks of the work term;
- Supervise the student and provide guidance when the student is setting learning goals at the start of the work term with a review mid-term and at the completion of the work
- Provide performance feedback to the student throughout the term and keeping the Co-op Coordinator current on any changes in the student's performance;
- Meet with the Co-op Co-ordinator during the work term visit and providing feedback concerning the student's performance and if there are concerns maintaining communication with the Co-op Co-ordinator;
- · Provide career information and guidance as appropriate;
- Complete a work term performance evaluation form and exit interview for the student at the conclusion of the work term; and
- Assist the student with the selection of a topic for a work term report and providing comments on the final work term report if appropriate.

Distance Education

The Distance Education program, administered by Open Learning and Educational Support, 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, CDs, DVDs etc., depending on the nature of the course. As well, courses incorporate online discussions, 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 Open Learning and Educational Support, 160 Johnston Hall, 519-767-5000, email: info@OpenEd.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.OpenEd.uoguelph.ca.

Financial Accounting

ACCT*2230*DE [0.50] Management Accounting ACCT*3330*DE [0.50] Intermediate Financial Accounting I

ANSC*2340*DE [0.50] Structure of Farm Animals ANTH*1150*DE [0.50] Introduction to Anthropology ASCI*3100*DE [0.50]Case Studies in Arts and Sciences Research ASCI*3200*DE [0.50]Issues in Public Health BIOL*1500*DE Humans in the Natural World [0.50]BIOL*2060*DE [0.50]Concepts in Human Physiology BIOM*2000*DE [0.50]BIOM*3090*DE [0.50] Principles of Pharmacology BIOM*3200*DE [1.00] Biomedical Physiology Plants, Biology and People BOT*2000*DE [0.50]BUS*2090*DE [0.50]Individuals and Groups in Organizations BUS*3000*DE [0.50]Human Resources Management CHEM*1060*DE [0.50] Introductory Chemistry CHEM*1100*DE [0.50] Chemistry Today Environmental Chemistry and Toxicology CHEM*3360*DE [0.50]CIS*1000*DE [0.50]Introduction to Computer Applications CIS*1200*DE Introduction to Computing [0.50][0.50]CIS*1500*DE Introduction to Programming CIS*2050*DE [0.50] Computers and Society CIS*2520*DE [0.50]Data Structures ECON*1050*DE [0.50] Introductory Microeconomics ECON*1100*DE [0.50]Introductory Macroeconomics ECON*2200*DE [0.50]Industrial Relations ECON*2100*DE Economic Growth and Environmental Quality [0.501]ECON*2310*DE [0.50]Intermediate Microeconomics ECON*2410*DE [0.50]Intermediate Macroeconomics ECON*2770*DE [0.50] Introductory Mathematical Economics ECON*2560*DE Theory of Finance [0.50]ECON*3660*DE [0.50]**Economics of Equity Markets** ECON*4400*DE [0.50] Economics of Organizations and Corporate Governance EDRD*2020*DE [0.50] Interpersonal Communication Introduction to Planning and Environmental Law EDRD*2650*DE [0.50]EDRD*3120*DE [0.50]**Educational Communication** EDRD*3140*DE [0.50]Organizational Communication EDRD*3160*DE [0.50] International Communication EDRD*3450*DE [0.50] Watershed Planning Practice EDRD*3500*DE [0.50]Recreation and Tourism Planning Tourism Planning in the Less Developed World EDRD*4010*DE [0.50]EDRD*4120*DE Leadership Development in Small Organizations [0.50]EDRD*4500*DE Planning Industrial Ecology: Design for Sustainability [1.00] ENGG*3240*DE [0.50] **Engineering Economics** ENGL*1200*DE [0.50]Reading the Contemporary World ENGL*2640*DE [0.50]Culture, Location, Identity: Minoritized Literatures in Canada and Beyond ENGL*2740*DE [0.50]Children's Literature ENGL*3360*DE Scottish Literary Cultures [0.50] ENVS*1060*DE [0.50]Principles of Geology ENVS*2050*DE [0.50]The Landscape of Scotland ENVS*2060*DE [0.50]Soil Science ENVS*2070*DE [0.50]Environmental Perspectives and Human Choices ENVS*2120*DE [0.50]Introduction to Environmental Stewardship ENVS*2130*DE [0.50] Eating Sustainably in Ontario ENVS*2210*DE [0.50] Apiculture and Honey Bee Biology ENVS*2250*DE [0.50]Geology of Natural Disasters ENVS*2270*DE [0.50]Impacts of Climate Change ENVS*3000*DE [0.50]Nature Interpretation ENVS*3010*DE [0.50]Climate Change Biology ENVS*3020*DE [0.50]Pesticides and the Environment ENVS*3040*DE [0.50]Natural Chemicals in the Environment ENVS*3080*DE Soil and Water Conservation [0.50]FOOD*2010*DE Principles of Food Science [0.50]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 FOOD*4310*DE [0.50]Food Safety Management Systems FREN*1090*DE [0.50]Basic French: Reading FREN*1100*DE [0.501]Basic French: Listening FREN*2020*DE [0.50]France: Literature and Society FREN*2500*DE [0.50]French Translation I French Composition II FREN*3520*DE [0.50] FRHD*1010*DE Human Development [0.50]FRHD*1020*DE [0.50]Couple and Family Relationships FRHD*2060*DE [0.50] Adult Development and Aging FRHD*2100*DE [0.50] Development of Human Sexuality FRHD*2110*DE [0.50]Exceptional Children and Youth FRHD*2260*DE [0.50] Infant Development

ACCT*2220*DE [0.50]

530		
FRHD*2280*DE	[0.50]	Adolescent Development
FRHD*3190*DE	[0.50]	Administration of Programs for Children
GEOG*1200*DE GEOG*1220*DE	[0.50]	Society and Space Human Impact on the Environment
GEOG*1220*DE GEOG*2210*DE	[0.50] [0.50]	Environment and Resources
GEOG*2510*DE	[0.50]	Canada: A Regional Synthesis
GEOG*3020*DE	[0.50]	Global Environmental Change
GEOG*3210*DE	[0.50]	Management of the Biophysical Environment Tourism and Environment
GEOG*3490*DE HISP*1100*DE	[0.50] [0.50]	Introductory Spanish I
HISP*1110*DE	[0.50]	Introductory Spanish II
HIST*2000*DE	[0.50]	The British Isles, 1066-1603
HIST*2040*DE HIST*2070*DE	[0.50]	War and Society World Religions in Historical Perspective
HIST*2120*DE	[0.50] [0.50]	Animals and Society
HIST*2250*DE	[0.50]	Environment and History
HIST*2260*DE	[0.50]	Religion and Society
HIST*2280*DE HIST*2610*DE	[0.50] [0.50]	Hockey in Canadian History Contemporary Canadian Issues
HIST*3020*DE	[0.50]	Sexuality and Gender in History
HIST*3130*DE	[0.50]	Popular Culture and Punishment, 1700-1900
HIST*3140*DE	[0.50]	Witch-hunts and Popular Culture
HIST*3540*DE	[0.50]	World War II
HORT*1120*DE HORT*3430*DE	[0.50] [0.50]	Grape and Wine Science Wine-Grape Culture
HROB*2010*DE	[0.50]	Foundations of Leadership
HROB*3010*DE	[0.50]	Managing and Rewarding Performance
HROB*3070*DE	[0.50]	Attracting and Acquiring Talent
HROB*4010*DE HROB*4060*DE	[0.50] [0.50]	Leadership Certificate Capstone Workforce Optimization
HTM*2030*DE	[0.50]	Control Systems in the Hospitality Industry
HTM*3180*DE	[0.50]	Casino Operations Management
HTM*3780*DE	[0.50]	Economics of Food Usage
MATH*1030*DE MATH*2150*DE	[0.50] [0.50]	Business Mathematics Applied Matrix Algebra
MBG*3060*DE	[0.50]	Quantitative Genetics
MBG*3090*DE	[0.50]	Applied Animal Genetics
MCS*1000*DE	[0.50]	Introductory Marketing
MCS*2020*DE MCS*2100*DE	[0.50] [0.50]	Marketing Information Management Personal Financial Management
MCS*3030*DE	[0.50]	Research Methods
MCS*3040*DE	[0.50]	Business and Consumer Law
MGMT*2150*DE	[0.50]	Introduction to Canadian Business Management
MGMT*3020*DE MGMT*3320*DE	[0.50] [0.50]	Corporate Social Responsibility Financial Management
MUSC*1060*DE	[0.50]	"Classical" Music: Context and Codes
MUSC*1130*DE	[0.50]	Introduction to Musicianship
MUSC*2140*DE	[0.50]	History of Jazz Music and Popular Culture
MUSC*2150*DE MUSC*2280*DE	[0.50] [0.50]	Masterworks of Music
NUTR*1010*DE	[0.50]	Introduction to Nutrition
NUTR*2050*DE	[0.50]	Nutrition Through the Life Cycle
PATH*3610*DE	[0.50]	Principles of Disease
PHIL*2030*DE PHIL*2060*DE	[0.50] [0.50]	Philosophy of Medicine Philosophy of Feminism I
PHIL*2070*DE	[0.50]	Philosophy of the Environment
PHIL*2100*DE	[0.50]	Critical Thinking
PHIL*2120*DE	[0.50]	Ethics Philosophy of Policies
PHIL*2130*DE PHIL*2600*DE	[0.50] [0.50]	Philosophy of Religion Business and Professional Ethics
PHIL*3040*DE	[0.50]	Philosophy of Law
PHYS*1020*DE	[0.50]	Introductory Physics
PHYS*1600*DE	[0.50]	Contemporary Astronomy
PHYS*3080*DE POLS*1400*DE	[0.50] [0.50]	Energy Issues in Canadian Politics
POLS*1500*DE	[0.50]	World Politics
POLS*2000*DE	[0.50]	Political Theory
POLS*2250*DE	[0.50]	Public Administration and Governance
POLS*2300*DE POLS*3250*DE	[0.50] [0.50]	Canadian Government and Politics Public Policy: Challenges and Prospects
POLS*3300*DE	[0.50]	Governing Criminal Justice
POLS*3370*DE	[0.50]	Environmental Politics and Governance
POLS*3440*DE	[0.50]	Corruption, Scandal and Political Ethics
PSYC*1000*DE PSYC*1010*DE	[0.50] [0.50]	Introduction to Psychology Quantification in Psychology
PSYC*2310*DE	[0.50]	Introduction to Social Psychology
PSYC*2360*DE	[0.50]	Introductory Research Methods

[0.50]	Principles of Sensation and Perception
[0.50]	Behavioural Neuroscience I
[0.50]	Introduction to Developmental Psychology
[0.50]	Cognitive Psychology
[0.50]	Personality
[0.50]	Psychology of Law
[0.50]	Psychological Measurement
[0.50]	Abnormal Psychology
[0.50]	Psychology of Sport
[0.50]	The Psychology of Death and Dying
[0.50]	Psychology of Learning Difficulties and Disabilities I
[0.50]	Psychology and Education
[0.50]	Intellectual Disabilities
[0.50]	Contemporary Artistic Practice
[0.50]	Introduction to Gender Systems
[0.50]	Sociology
[0.50]	Social Deviance
[0.50]	Homicide
[0.50]	Statistics I
[0.50]	Statistics for Business Decisions
[0.50]	Contemporary Cinema
[0.50]	Environmental Chemistry and Toxicology
[1.00]	The Politics, Science and Culture of Hunger
	[0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50] [0.50]

 Getting ready for Calculus, a non-degree credit preparatory course, is also offered via distance.

Note: Please check with Open Learning and Educational Support regarding the technology and resource requirements (e.g. computer, internet, DVD player, etc.) for the specific course(s) in which you are interested.

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.

The Diploma in Applied Statistics, the Certificate in Business, the Certificate in Communication Process, the Certificate in Food Science, the Certificate in Environmental Citizenship, the Certificate in Environmental Conservation, the Certificate in Hospitality Studies, 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).

General Studies

The objective of the General Studies program is to provide mature students with the opportunity to take university courses before registering in a specific degree program or to take university courses for continued learning with no immediate intention of registering in a degree program. The General Studies program does not lead towards a specific undergraduate degree at the University of Guelph. Initially, students register for part time studies only.

Academic Counselling

General Studies students can obtain counselling for selecting courses, and planning their future program from the B.A. Counselling Office located in Room 130 MacKinnon Building. Prospective students should contact the Admissions Section of the Office of Registrarial Services.

Financial Assistance

Students registered in 3 or more courses of the General Studies program are eligible to apply to the <u>Ontario Student Assistance Program</u> (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

- 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.
- 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.
- 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, and counselling are available through the graduate coordinators of each department/school. Further information on graduate programs may be found in the on-line Graduate Calendar at https://www.uoguelph.ca/registrar/calendars/graduate/current/. Applications is made on-line and accessed through Graduate Studies website at https://www.uoguelph.ca/graduatestudies/. 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 Graduate Diploma (G.Dip) or the Master of Arts (M.A.), Master of Applied Science (M.A.Sc.), Master of Science (M.Sc.), Master of Landscape Architecture (M.L.A.), Master of Applied Nutrition (M.A.N.) Master of Bioinformatics (M.Bnf.), Master of Biomedical Science (M.B.S.), Master of Business Administration (M.B.A.), Master of Engineering (M.Eng.), Master of Environmental Sciences (MES), Master of Fine Art (M.F.A.), Master of Science in (Planning) M.Sc. (Planning), Master of Planning (M.Plan), Master of Public Health (M.P.H.), 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

Bachelor of Arts and Sciences

The University of Guelph offers an 8 semester (20.00 credits) honours program leading to a Bachelor of Arts and Sciences (B.A.S.) degree.

The Bachelor of Arts & Sciences program is designed for students who are motivated equally by the study of Arts/Social Sciences and the Sciences, and who find challenge and satisfaction in testing the traditional boundaries of study through undergraduate level interdisciplinary work. The program meets these objectives through a unique structure that accredits students in an Arts/Social Sciences core, a Sciences core, a Subject Area core of interdisciplinary humanities and sciences courses (ASCI*), and a minor in each of the Arts/Social Sciences and the Sciences (see below for choices of minors). The structure of the program ensures disciplinary rigour and breadth through completion of core requirements for a B.A.S. degree, concentration in two distinct minors, and concentration of learning in an academic cohort of B.A.S. students through the interdisciplinary ASCI courses in the B.A.S. core. This core is open only to students in the B.A.S. program. For more information please see: http://www.uoguelph.ca/bas/

Bachelor of Commerce

Agricultural Business

Hotel and Food Administration

Human Resources Management

Management Economics in Industry & Finance

Marketing Management

Public Management

Tourism Management

Bachelor of Science in Environmental Sciences

Open Learning

The University of Guelph serves the learning needs of people 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.

Open Learning and Educational Support

Open Learning and Educational Support is the institutional focus for distance education, continuing education, and the Open Learning program. As such, Open Learning and Educational Support 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 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 may not be required to complete assignments or related exams.

Further information is available from Open Learning and Educational Support, 160 Johnston Hall, by email: info@OpenEd.uoguelph.ca, by phone 519-767-5000 or at www.OpenEd.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.

Guaranteed Admission to the B.Comm. Program

Open Learning program students with no previous post-secondary education will be offered guaranteed admission to the Bachelor of Commerce (B.Comm.) degree program under the following conditions.

- Applicants must satisfy the English proficiency requirements (see the Undergraduate Calendar, Section IV Admission, English Proficiency).
- 2. Successful completion of four-degree-level courses (2.00 credits) with a cumulative average of 70% or above in at most 6 course (3.00 credit) attempts. The four courses (2.00 credits) used in the calculation of the cumulative average will include any degree-level courses used to meet the English and mathematics requirements and must satisfy the following:
 - a. at least 1.00 credits must be from arts and social sciences;
 - b. no more than 1.00 credits from mathematics and statistics combined may be used to calculate the cumulative average.
- ${\it 3. Applicants must satisfy the following English and mathematics requirements:}\\$

English Requirement

A grade of 75% or higher in English 12U or the successful completion of one course (0.50 credits) from:

ENGL*1200, EURO*1050, GEOG*1220, HIST*1150, HIST*2000, HIST*2040, HIST*2070, HIST*2260, HIST*2610, HIST*2830, POLS*1400, SOC*1100, WMST*1000, UNIV*2000

Mathematics Requirement

A grade of 75% or higher in the 12U mathematics course(s) required for the applicant's intended major or the successful completion of MATH*1000/MATH*1030.

Open Learning program Certificates and Diplomas

Certificate in Business

Certificate in Communication Process: Bridging Theory and Practice

Certificate in Environmental Citizenship

Certificate in Environmental Conservation

Certificate in Food Science

Certificate in Hospitality Studies

Certificate in Leadership

Certificate in Public Policy and Administration

Certificate in Scottish Studies

(Refer to Certificates & Diplomas in this section for descriptions or contact Open Learning and Educational Support.)

Open Learning program Courses*

Please refer to Distance Education in this section for a listing of courses offered through the Open Learning program.

*please check with Open Learning and Educational Support regarding the technology and resource requirements (e.g. computer, internet, DVD, etc.) for the specific course(s) in which you are interested.

Open Learning Scholarships/Bursaries

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. More information can be found at: http://www.OpenEd.uoguelph.ca/bursary/

Qualification(s): Canadian citizens or permanent residents with the greatest financial need.

Equine Science Certificate Scholarship

This scholarship provides the value of tuition for one course in the Equine Science Certificate program. The scholarship is available to Open Learning students who have completed two courses in the Equine Science Certificate Program with a minimum cumulative average of 80%. Apply to Senior Manager, Equine Guelph by February 12 with an essay of no more than two pages on the value of the program and its impact on the well-being of the student's horse. This award may be held only once.

Virginia L. Gray Memorial Bursary

Virginia L. Gray dedicated 38 years of her life to the University community until her retirement in 2007 as Director, Office of Open Learning. Virginia's innovative approach to education positioned the University of Guelph to become an international leader in continuing and distance education. Virginia was committed to eliminating barriers to education and to supporting students who had a desire to advance their academic and career goals through education. Family, friends and colleagues of Virginia Gray have established and contributed to the Virginia L. Gray Memorial Bursary as a tribute to her exemplary work. Students interested in enrolling in an Open Learning and Educational Support continuing education or Open Learning program course are eligible to apply. Applicants must be Canadian citizens or Permanent residents. Applications will be reviewed on January 30th and July 30th for upcoming course offerings. Applications must include a letter outlining financial need and academic goals, and must include supporting documentation. Students may receive the bursary only once.

Prof. H.J. Malik Statistics Prize

This \$150 prize is provided in honour of H.J. Malik, Professor Emeritus in the Department of Mathematics and Statistics, by family, colleagues and friends. Application not required. Open Learning program distance education student who has completed the course 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.

Distance Education

Open Learning and Educational Support 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. Open Learning and Educational Support 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 Open Learning and Educational Support, Johnston Hall Room 160, 519-767-5000, info@OpenEd.uoguelph.ca, or at www.OpenEd.uoguelph.ca

Continuing Education

Open Learning and Educational Support annually offers over 100 professional development programs, courses, conferences, and certificates in collaboration with academic departments and/or professional organizations. For detailed information on learning opportunities offered by Open Learning and Educational Support contact us at tel: 519-767-5000; fax 519 767-1114; email: info@OpenEd.uoguelph.ca; website: www.OpenEd.uoguelph.ca; or visit us in Johnston Hall Room 160.

Creative Writing at Guelph and the Creative Writing Certificate

Creative Writing at Guelph is a new program of writing courses in a variety of genres and, for dedicated learners, a focused program of study resulting in a certificate. These new courses open to all, will offer practical guidance in how to generate ideas, take that spark of inspiration to the page, advance your writing skills, and explore your creativity while offering advice about publishing and bringing your work to the world. Join a vibrant community of writers and readers and make creative writing a part of your creative life.

Currently there are ten courses being offered. More courses will be added in the following year. Students register in courses individually and may complete the courses in any order. Not all courses are offered every semester

To be complete the Creative Writing Certificate students are required to complete six courses:

Required Courses:

- · Introduction to Creative Writing
- · Creative Writing through Reading

Students will choose four electives (two in your genre, one outside of your genre speciality)

- · Short Story
- The Novel
- · Creative Nonfiction
- The Art of the Play: creating characters, developing stories and writing dialogue
- Poetry
- Young Adult Writing
- · Writing Mystery
- Talking the Talk: The art of writing dialogue

To complete the Creative Writing Certificate students must complete a final capstone writing project where students will complete a 75-page manuscript in prose or a 30-page manuscript in poetry.

• Capstone Writing Project

Creative Writing at Guelph is being delivered in partnership with the Department of English and Theatre Studies and University of Guelph's Creative Writing MFA program. Students and alumni of this prestigious and nationally regarded graduate program will be involved in course development and the teaching of these new creative writing courses.

For details and to register please see: http://www.creativewritingatguelph.ca

Certificate in Coaching for Leadership

Employee engagement and performance management are essential drivers in high performing organizations. The Coaching for Leadership program focuses on developing your leadership skills using the coach approach.

Courses will examine the necessary components of a coaching culture and assist in developing leadership skills in an online learning environment. Participants will learn about performance management and how to manage conflict to build high trust relationships. The program is focused on leadership development using coaching and communication to engage employees to achieve organizational excellence.

The program consists of four online courses. All courses in the program have been designed as independent courses and do not have to be completed in sequence. Each course is eight (8) weeks in duration resulting in approximately 30 contact hours. There are no formal admission requirements for the program however the course has been designed for senior leaders, managers, supervisors, human resource professionals, project managers and organizational consultants or anyone who is aspiring to be a leader. Participants can complete the certificate program within approximately one (1) year.

Required Courses

- Creating a Foundation for Leadership Coaching
- Performance Management Fundamentals
- · The Coach Approach
- Harness Conflict and Build Trust

To learn more, please visit the website at: http://www.CoachingforLeadership.ca or contact Open Learning and Educational Support by email at info@OpenEd.uoguelph.ca or call 519-767-5000.

Certificate In Couple & Family Therapy Studies

(co-sponsored by the Ontario Association for Marriage and Family Therapy) http://www.oamft.com/

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 & Methods of Family Therapy: Foundations of the Field
- Theories & Methods: Post-Modern Models
- Theories & Methods of Couple Therapy

Elective Courses (Choose 3):

- · Change Strategies in Therapy
- Family Therapy and Mental Health
- · Research in Couple and Family Therapy
- · Systemic Approaches with the Addicted Client: Assessment and Intervention
- Transition: The Human Life Cycle
- Professional Issues in Couple and Family Therapy
- · Sexuality Across the Lifespan
- Families in Transition: Divorce, Single Parenting and Re-Marriage
- · Violence in Families
- Spirituality: A New Story in Couple and Family Therapy?
- Advanced Therapy in Couple Relationships
- Therapy Interventions for Trauma, Abuse and Violence

http://www.couplefamilytherapystudies.ca.

Diploma in Human Resources Management

Human resources management is critical to achieving organizational effectiveness in today's business environment. Participants will learn how to leverage and develop their skills to achieve creative and innovative organizational goals.

The Diploma in Human Resources Management program curriculum links theory with practice in order to develop HR core competencies and business acumen of a Certified Human Resource Professional. In order to receive your Diploma in Human Resources Management you must complete 10 courses within the program which include nine Human Resources Professional Association (HRPA) approved courses and one online distance education elective. There are no formal admission requirements for individuals interested in registering for most of the courses. Courses are offered in the fall, winter and summer semesters.

Required Courses:

- Human Resources Administration
- Organization and Management
- Finance and Accounting Concepts
- · Occupational Health and Safety
- · Compensation and Benefits
- Training and Development
- Labour-Management Relations
- Human Resources Planning
- Recruitment and Selection

One subject-appropriate Open Learning program elective course offered through distance education. For a list of subject-appropriate elective courses, please visit the website at: http://www.hrdiploma.com. Elective course must be pre-approved by the Manager, Program Development.

For more information and to apply to this program, visit http://www.hrdiploma.com.

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. Classes in grammar, reading, writing, listening and speaking help students achieve the advanced level English skill needed to be successful in academic studies. Students who successfully complete the Advanced level earn the University of Guelph Certificate of English Proficiency, which meets the English proficiency requirements for entry into undergraduate and graduate studies at the University of Guelph and the University of Guelph-Humber. Applicants are encouraged to have an intermediate English skill level, and an academic goal to study at a university.

Equine Studies Online Certificate Programs

Equine Science Certificate

The Equine Science Certificate is designed to help you improve the management and welfare of horses in your care. The courses are based on scientific research and are presented in a practical format, making it easy for you to directly apply what you have learned to the health and performance of your horse. This program is ideal for the horse owner. The Equine Science Certificate requires you to complete six courses successfully. All of the courses are completed online.

Required Courses:

- Management of the Equine Environment
- Health & Disease Prevention
- · Functional Anatomy
- Equine Nutrition

Elective Courses (Select two):

- Growth & Development
- Exercise Physiology
- Equine Behaviour Equine Genetics

For details and to apply, please see http://www.equinestudiesonline.ca/equine-science-certificate/ This program is provided in partnership with Equine Guelph, the horse owner's Centre at the University of Guelph.

Certificate in Equine Business Management

The Certificate in Equine Business Management is for anyone interested in working in the business and management aspects of the equine industry. This certificate program will provide you with the business skills and tools you need to run a successful business including; writing a business plan, developing and implementing marketing and communication strategies including social media, establishing a financial management system and understanding financial reports. The Certificate in Equine Business Management requires you to complete six courses. A selection of courses is offered each semester.

Required Courses:

- Equine Business Management
- Management of the Equine Environment
- The Equine Industry
- Finance and Risk Management
- Marketing and Communication in the Equine Industry

Elective Courses (Select one):

- Equine Journalism
- Equine Event Management
- Stewardship of the Equine Environment

For details and to apply, please see http://www.equinestudiesonline.ca/certificate-in-equine-business-management/ This program is delivered in partnership with Equine Guelph, the horse owner's centre at the University of Guelph.

Equine Veterinary Technicians Certificate

The Equine Veterinary Technician Certificate is an equine-specific professional development program for veterinary technicians and animal health technologists. This program will provide you with the opportunity to explore research and evidence-based practice in equine health & management practices in three online courses, and assisting the veterinarian in the management, treatment and response to equine medical situations in three practicum courses. You may take the full certificate program or only the courses which interest you. The Equine Veterinary Technicians Certificate will provide equine-specific academic (research and evidence-based) and skill development (practicum's) for Veterinary Technicians. This program is delivered in partnership with Equine Guelph and University of Guelph, Ridgetown Campus.

Required Courses:

The first three courses are delivered in an online distance education format. The advanced online courses are available to all students who meet the pre-requisite requirements.

- · Advanced Equine Functional Anatomy
- Pre-requisite is Equine Functional Anatomy or equivalent
- Advanced Equine Health through Nutrition

- Pre-requisite is Equine Nutrition or equivalent
- · Advanced Equine Behaviour
- Pre-requisite is Equine Behaviour or equivalent

The following courses are delivered in a face-to-face practicum. These courses are available to students who are registered in a Veterinary Technology program, have graduated from Veterinary Technology program or are currently a Registered Veterinary Technician or equivalent. International student designations will be considered.

- · Equine Dentistry
- Equine Reproduction
- · Equine Critical Care

To be awarded the certificate students will have:

- Completed all courses with a minimum grade of 60 percent
- · Graduated from a recognized Veterinary Technician program or
- · Qualified for the Registered Veterinary Technician designation or equivalent.

For more information contact Open Learning and Educational Support at info@OpenEd.uoguelph.ca or 519-767-5000. Program information is available at http://www.equinestudiesonline.ca/equine-veterinary-technician-certificate/

Equine Welfare Certificate

Our equine welfare courses engage students who have a passion for making a better world for our equines. You will examine current research and practices in equine welfare discussing the biological and emotional factors that affect a horse's quality of life. The study of equine welfare encompasses all aspects of animal well-being, including proper housing, management, nutrition, disease prevention, responsible care, humane handling, and where necessary, humane euthanasia. At the end of program you will have an understanding of equine welfare issues across all disciplines, the problems and the potential solutions

This program is delivered in partnership with the Campbell Centre for the Study of Animal Welfare and Equine Guelph.

Required Courses:

- Equine Welfare
- · Global Perspectives in Equine Welfare
- · Advanced Equine Behaviour
- Equine Nutrition OR Advanced Equine Health through Nutrition

Electives (select 2):

- Health & Disease Prevention
- Equine Industry
- Equine Nutrition OR Advanced Equine Health through Nutrition
- · Advanced Equine Anatomy

For details and to apply visit http://www.EquineWelfareCertificate.ca

Diploma in Equine Studies

The Diploma in Equine Studies provides a comprehensive course of study and is suitable for those interested in a career in the equine industry. It is comprised of ten online courses and is designed to provide advanced knowledge. A selection of courses is offered each semester. Students who have completed or are currently registered in the Equine Science Certificate program may opt to continue their studies in order to earn the Diploma, and students new to the Diploma in Equine Studies will be provided with a comprehensive starting point.

Required Courses:

- Management of the Equine Environment
- Health & Disease Prevention
- · Functional Anatomy
- Equine Nutrition
- Equine Behaviour
- · Stewardship in the Equine Environment

Elective Courses (Select Four):

- Equine Growth & Development
- · Equine Exercise Physiology
- Equine Genetics
- The Equine Industry
- Equine Business Management
- Finance and Risk Management
- · Marketing and Communication in the Equine Industry
- Equine Journalism
- Equine Event Management

For details and to apply, please see http://www.equinestudiesonline.ca/diploma-in-equine-studies./

This program is delivered in partnership with Equine Guelph, the horse owner's Centre at the University of Guelph.

Introduction to Geographic Information Systems (GIS) for Public Health

Geographic Information Systems (GIS) represent a number of technologies that allow us to map and analyze locational patterns of just about anything, as long as data that represent those phenomena exist (or can be generated from given data). The main purpose of this course is to teach the core concepts of these technologies and to provide participants with the skills to prepare informative maps using their own spatial data, as well as conduct preliminary spatial analyses on those data.

This new eight week online course is intended primarily for professional practitioners currently in the public health and/or epidemiology fields, or recent graduates who are interested in gaining employment in this field. The course is offered through an asynchronous online format, using industry standard software, ArcGIS Desktop and SaTScan. Topics include what a geographic information system actually is, how spatial data are stored on a computer, projections and coordinate systems, creating thematic maps, and analyzing spatial data for potential significant trends/patterns. Core GIS concepts are taught using applicable public health examples and cover varying scales (local, regional/continental, global).

For details and to register please see: http://www.gispublichealth.com/

Landscape/Horticulture Online Diploma Programs

The Landscape/Horticulture Diploma programs include two diploma options:

The Horticulturist Diploma

The Horticulturist Diploma is designed for landscape company staff, parks and recreation employees, institutional ground staff, naturalists, urban gardeners and environmental advocates. The Diploma will enhance student knowledge and skills relating to residential gardens, urban spaces and small public recreational areas. This new online program will offer a high standard of horticultural understanding and insight encouraging students to locate, analyze and put into practice sound horticultural knowledge.

Required Courses:

- Cultural Practices for Plants
- Introduction to Plant Identification
- Designing the Landscape
- · Ornamental Plant Protection
- Introduction to Soils and Plant Growth
- · Weed Management in Horticulture

Required Diploma Courses:

- Theory and Principles of Sustainable Urban Agriculture and Horticulture
- · Advanced Plant Identification Techniques
- Treating Pests and Disease in Horticulture with Integrated Pest Management (IPM)

For details and to apply, please visit http://www.guelphhort.com/.

The Creating Landscapes Diploma

The Creating Landscapes Diploma is a new online program for landscape professionals wishing to develop or improve design skills and for homeowners wanting a better understanding of the design and function of their landscape environment. This Diploma will provide students with knowledge and skills in the theories and principles guiding meaningful landscape design and in the techniques used to create landscape drawings. The depth and breadth of student knowledge and skills will be expanded through practice, in particular, a Capstone Landscape Design Project that amalgamates many important aspects of design practice.

Required Courses:

- Landscape Design I
- Landscape Design II
- Introduction to Landscape Construction
- Introduction to Plant Identification
- Computer Assisted Design
- · Computer Assisted Design II
- Business Management Principles
- Presentation Styles- Extending Your Graphic Skills
- Capstone Landscape Design Project

Required Diploma Courses:

- Presentation Styles- Extending Your Graphics Skills
- · Designing For Sustainability
- Computer Assisted Design II
- Capstone Landscape Design Project

For details and to apply, please visit http://www.guelphhort.com/.

Sustainable Urban Agriculture/Horticulture Online Certificate Programs

The Sustainable Urban Agriculture/Horticulture Online Certificate Programs include two certificates and nine online/web-based courses. Learners may enrol in one or more individual courses or choose a study path to obtain the certificates.

Sustainable Urban Agriculture Certificate

The Sustainable Urban Agriculture Certificate is designed for urban dwellers, city planners and community gardeners interesting in growing food in a sustainable manner to support families, neighbourhoods and communities.

Core Courses:

- Theory and Principles of Sustainable Urban Agriculture and Horticulture
- Fundamentals of the Role of Plants in Urban Sustainability
- Sustainable Urban Crop Production
- Food Processing for Urban Gardeners

Elective Courses - choose one of the following:

- · Ecology of Gardens and Landscapes in an Urban Environment
- Agricultural Plant Selection for Urban Gardeners
- · Business Management Principles

For details and to apply, please see http://www.urbanhort.ca.

Sustainable Urban Horticulture Certificate

The Sustainable Urban Horticulture Certificate focuses on the environmental, social and economic implications of horticulture in our cities. The program is designed for landscape designers and builders, municipal planners and environmental advocates interested in micro-economic sustainability and maximizing aesthetic and property values through innovative garden design.

Core Courses:

- Theory and Principles of Sustainable Urban Agriculture and Horticulture
- Fundamentals of the Role of Plants in Urban Sustainability
- Naturalizing and Restoring Urban Gardens
- · Business Management Principles

Elective Courses - choose one of the following:

- Ecology of Gardens and Landscapes in an Urban Environment
- Introduction to Plant Identification

For details and to apply, please see http://www.urbanhort.ca.

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

Golf Course Superintendents Association of America

Human Resources Professionals Association

Integrated Pest Management - Plant Health Care Council

Ontario Association of School Business Officials

Ontario Association for Marriage and Family Therapy

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 Open Learning and Educational Support, Room 160, Johnston Hall, by email: info@OpenEd.uoguelph.ca, by phone 519-767-5000 or http://www.OpenEd.uoguelph.ca/