# 2009-2010 Undergraduate Calendar

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2009-2010 academic year, including the Summer Semester 2009, the Fall Semester 2009 and the Winter Semester 2010.

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.

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• The Association of Universities and Colleges of Canada

#### Contact Information:

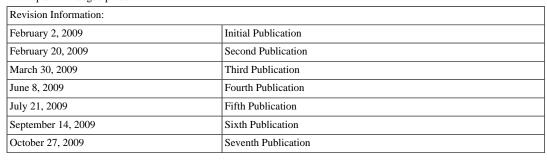
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# **Disclaimer**

# **University of Guelph 2009**

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2009-2010 academic year, including the Summer Semester 2009, the Fall Semester 2009 and the Winter Semester 2010.

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: Undergraduate Program 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/registrar/index.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 Undergraduate Program 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 http://www.uoguelph.ca/policies/pdf/ORSInfoReleasePolicy060610.pdf.

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Introductory Microeconomics

Integrated Project (Environmental)

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

The University of Guelph, in collaboration with the regional campuses at Ridgetown and Kemptville, offers a 20.00 credit program, normally completed over 8 semesters, leading to a Bachelor of Bio-Resource Management degree (B.B.R.M.). This degree was designed for students who do not intend to pursue post-graduate studies and are strongly focused on securing employment that makes use of the knowledge acquired in their bachelor's degree.

This degree is a unique blend of applied and theoretical learning, with an emphasis on experiential learning opportunities. At the present time, two majors, Environmental Management and Equine Management, are available in the program through University of Guelph's Ridgetown campus and Kemptville campus respectively with Semester 5 to 8 offered at the Guelph campus.

# **Program Information**

The Bachelor of Bio-Resource Management degree program combines business studies and technical training with a strong emphasis on hands-on learning. A solid foundation in applied aspects of science, technology and business provides graduates with sufficient breadth and expertise to become competent managers in the environmental or equine fields. Students begin studying in one of the following management majors during the first semester: Environmental Management, Equine Management.

The first 10.00 credits of the Environmental Management Major are available through the Ridgetown campus and the first 10.00 credits of the Equine Management Major are available through the Kemptville campus. The additional 10.00 credits for both majors are available through the Guelph Campus.

Students will be encouraged to integrate their academic program with a well-planned series of employment activities in the summer months and to develop their leadership and interpersonal skills in on-campus and community activities. There is a strong commitment in the curriculum to personal development and students are encouraged to identify goals that they wish to accomplish throughout their university career.

#### Academic Advising and Counselling

#### **Program Counselling**

Program Counsellors are available at both the Ridgetown, Kemptville and Guelph campuses to assist in-course students who require information or advice about their program or other academic regulations and who seek information about resources available to students. For information about how to contact a program counsellor, and for more information about program counselling, see Section VII -- Academic Counselling of the current Undergraduate Calendar.

#### Departmental Advising

On entering the program all students are assigned to a faculty advisor who will mentor them throughout their first two years. The faculty advisor is familiar with the academic requirements of the program and is aware of career opportunities. Students are strongly encouraged to attend all meetings called by their advisor, and to set up individual meetings with him/her when they have questions or concerns about their performance or progress in the program.

#### **Continuation of Study**

Students are advised to consult the regulations for Continuation of Study which are outlined in detail in Section VIII -- Undergraduate Degree Regulations & Procedures in the current calendar.

#### **Conditions for Graduation**

To qualify for the degree Bachelor of Bio-Resource Management, the student must successfully complete a minimum of 20.00 credits as set out in the Schedule of Studies as listed. In addition, students must meet the continuation of study requirements at the time of graduation and have a minimum cumulative average of 60%.

#### Schedule of Studies

Courses specified in the Schedule of Studies are required courses and must be successfully completed. A full time course load normally includes 2.50 credits.

## Special Expenses

Expenses for field trips and labs can range from \$20 to \$100 per semester. In certain courses modest expenses will be incurred for supplies. Equine Management students are welcome to board horses at local facilities. Please contact the Kemptville Registrar, Heather Buck at Heather Buck <hbuck@kemptvillec.uoguelph.ca> for a listing of boarding facilities.

#### **B.B.R.M. Program Regulations**

#### Recommendations

Students entering the degree program who are deficient in U level Mathematics or Chemistry should consult with the program counsellor.

## **Environmental Management Major (EM)**

#### Dean's Office OAC

This major will require the completion of 20.00 credits.

#### Semesters 1 to 4 offered at the Ridgetown campus

#### Semester 1

ENVM\*1090

ECON\*1050

ENVM\*2500

BIOL*1030	[0.50]	Biology I
CIS*1000	[0.50]	Introduction to Computer Applications
ENVM*1000	[0.50]	Introductory Environmental Science
ENVM*2020	[0.50]	Environmental Law
SOIL*2010	[0.50]	Soil Science
Semester 2		
AGR*1050	[0.50]	Communication Skills
BIOL*1040	[0.50]	Biology II
ENVM*1020	[0.50]	Introduction to Environmental Microbiology
ENVM*1150	[0.50]	Water Resource Management
0.50 electives		
Semester 3		
CHEM*1040	[0.50]	General Chemistry I

ENVM*1050	[0.50]	Surveying and GIS	
ENVM*1100	[0.50]	Ecology	
0.50 electives			
Semester 4			
AGEC*1100	[0.50]	Introduction to Business	
AGR*2100	[0.50]	Human Resource Management	

## [0.50]0.50 electives **Electives Available at Ridgetown:**

[0.50]

[0.50]

		8
ENVM*1070	[0.50]	Nutrient Management
ENVM*1120	[0.50]	Environmental Monitoring
ENVM*2050	[0.50]	Agriculture and Environmental Stewardship
ENVM*2060	[0.50]	Sewage and Wastewater Treatment
ENVM*2070	[0.50]	Water Treatment
ENVM*2080	[0.50]	Industrial Waste Management
ENVM*2090	[0.50]	Spills Response Planning

#### Semesters 5 to 8 offered on Guelph campus

#### Semester 5

AGEC*2700	[0.50]	Survey of Natural Resource Economics	
AGR*3500	[0.50]	Experiential Education	
SOIL*3080	[0.50]	Soil and Water Conservation	
1.00 electives or restricted electives			

### Semester 6

GEOL*3130	[0.50]	Agrogeology	
MET*2020	[0.50]	Agrometeorology	
NRS*3000	[0.50]	Environmental Issues in Agriculture and Landscape	
		Management	
STAT*2060	[0.50]	Statistics for Business Decisions	
0.50 electives or restricted electives			

#### Semester 7

AGEC*4290	[0.50]	Land Economics
One of:		
ENVB*4420	[0.50]	Problems in Environmental Biology
NRS*4110	[0.50]	Natural Resources Management Field Camp *
SOIL*4250	[0.50]	Soils in the Landscape

<sup>1.50</sup> electives or restricted electives

#### Semester 8

AGEC*4310	[0.50]	Resource Economics
GEOL*3060	[0.50]	Groundwater
NRS*3600	[0.50]	Remote Sensing

1.00 electives or restricted electives

Students must successfully complete a minimum of 6.00 credits at the 3000 level or higher, of which at least 2.00 credits must be at the 4000 level.

#### **Restricted Electives**

Students would be required to take a minimum of 2.00 credits from one or more of the following groups and should consult with a faculty advisor in planning their choice. Students are advised to pay particular attention to pre-requisite requirements when choosing individual courses, and seek advice as needed.

# **Nutrient Management**

ENVB*4020	[0.50]	Water Quality and Environmental Management
PBIO*4100	[0.50]	Soil Plant Relationships
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics

<sup>\*</sup> Students choosing NRS\*4110 must choose electives in 3rd year to obtain the required prerequisites.

SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management
SOIL*4130	[0.50]	Soil and Nutrient Management
Natural Resor	urce Mana	gement
ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*3300	[0.50]	Applied Ecology and Environment
ENVB*4020	[0.50]	Water Quality and Environmental Management
ENVB*4780	[0.50]	Forest Ecology
GEOG*3610	[0.50]	Environmental Hydrology
NRS*2120	[0.50]	Introduction to Environmental Stewardship
NRS*3100	[0.50]	Resource Planning Techniques
SOIL*3050	[0.50]	Land Utilization
Environment	al Protectio	on
BIOC*2580	[0.50]	Introductory Biochemistry
ENVB*2010	[0.50]	Food Production and the Environment
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3030	[0.50]	Pesticides and the Environment
ENVB*3300	[0.50]	Applied Ecology and Environment
ENVB*4240	[0.50]	Biological Activity of Pesticides
MICR*4140	[0.50]	Soil Microbiology and Biotechnology
MICR*4180	[0.50]	Microbial Processes in Environmental Management
PBIO*4530	[0.50]	Environmental Pollution Stresses on Plants

# **Equine Management Major (EQM)**

#### Dean's Office OAC

This major will require the completion of 20.00 credits.

Students enrolling in the Equine Management major will be required to submit an equine background information form.

# Semesters 1 to 4 offered at the Kemptville campus

[0.50]

#### Semester 1 - Fall

BIOL\*1030

ENVM*1090	[0.50]	Occupational Health and Safety	
EQN*1020	[0.00]	Equine Management I	
EQN*1060	[0.50]	Equine Event Management I	
EQN*1100	[0.50]	Introduction to Equine Industry	
SOIL*2010	[0.50]	Soil Science	
Semester 2 - V	Vinter		
AGR*1050	[0.50]	Communication Skills	
BIOL*1040	[0.50]	Biology II	
CIS*1000	[0.50]	Introduction to Computer Applications	
EQN*1030	[0.00]	Equine Management II	
EQN*1040	[0.50]	Equine Facility Management and Design	
EQN*1070	[0.50]	Equine Event Management II	
Semester 3 - F	all		
AGR*2030	[0.50]	Pasture Management	
CHEM*1040	[0.50]	General Chemistry I	
ECON*1050	[0.50]	Introductory Microeconomics	
EQN*2020	[0.50]	Stable Management	
EQN*2040	[0.50]	Equine Anatomy and Physiology	
Semester 4 - Winter			
AGEC*1100	[0.50]	Introduction to Business	
AGR*2100	[0.50]	Human Resource Management	
BUS*2220	[0.50]	Financial Accounting	
EQN*2050	[0.50]	Introduction to Equine Nutrition	
EQN*2200	[0.50]	Equine Industry Trends and Issues I	
Semesters 5 to 8 offered at the Guelph campus			

Biology I

# Semester 5 - Fall

AGR*2350	[0.50]	Animal Production Systems and Industry		
AGR*3500	[0.50]	Experiential Education		
MCS*1000	[0.50]	Introductory Marketing		
One of:				
SOIL*3080	[0.50]	Soil and Water Conservation		
SOIL*4090	[0.50]	Soil Management		
SOIL*4130	[0.50]	Soil and Nutrient Management		
0.50 electives				
Semester 6 - Winter				

ANSC*3210	[0.50]	Principles of Animal Care and Welfare
EQN*3050	[0.50]	Equine Exercise Physiology
NRS*3000	[0.50]	Environmental Issues in Agriculture and Landscape
		Management
STAT*2060	[0.50]	Statistics for Business Decisions
0.50 electives		

#### Semester 7 - Fall

AGEC*3310	[0.50]	Operations Management
EQN*4020	[0.50]	Feeding the Performance Horse
1.50 electives		
Semester 8 -	Winter	
AGR*4500	[0.50]	Agrifood Industry Problem-Solving
EQN*4400	[0.50]	Equine Industry Trends and Issues II
1.50 electives		

Students must successfully complete a minimum of 6.00 credits at the 3000 level or higher, of which at least 2.00 credits must be at the 4000 level.