

# 2011-2012 Undergraduate Calendar

The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2011-2012 academic year, including the Summer Semester 2011, the Fall Semester 2011 and the Winter Semester 2012.

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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Contact Information:

University of Guelph  
Guelph, Ontario, Canada  
N1G 2W1  
519-824-4120  
<http://www.uoguelph.ca>

Revision Information:

Date	Description
February 1, 2011	Initial Publication
April 4, 2011	Second Publication
July 20, 2011	Third Publication
October 12, 2011	Fourth Publication
March 15, 2014	Updates for AODA Compliance

UNIVERSITY  
of GUELPH

CHANGING LIVES  
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# Disclaimer

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## University of Guelph 2011

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The information published in this Undergraduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2011-2012 academic year, including the Summer Semester 2011, the Fall Semester 2011 and the Winter Semester 2012.

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.

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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**

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### **Collection, Use and Disclosure of Personal Information**

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

### **Statistics Canada - Notification of Disclosure**

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

### **Address for University Communication**

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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**

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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**

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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**

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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**

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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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## Table of Contents

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<b>Bachelor of Bio-Resource Management Degree (B.B.R.M.) .....</b>	<b>378</b>
Program Information .....	378
Environmental Management Major (EM) .....	378
Equine Management Major (EQM) .....	379

## 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 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

Equine Management students may have the opportunity to board their horse on campus or at a local facilities. Please contact BBRM program counsellor Katrina Merkies at <kmerkies@kemptvillec.uoguelph.ca> for more information.

### 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

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*1090	[0.50]	Occupational Health and Safety
ENVM*1050	[0.50]	Surveying and GIS
ENVM*1100	[0.50]	Ecology

0.50 electives

##### Semester 4

AGR*2100	[0.50]	Human Resource Management
ECON*1050	[0.50]	Introductory Microeconomics
ENVM*2500	[0.50]	Integrated Project (Environmental)
FARE*1100	[0.50]	Introduction to Business

0.50 electives

#### Electives Available at Ridgetown:

ENVM*1070	[0.50]	Nutrient Management
ENVM*1120	[0.50]	Environmental Monitoring
ENVM*1130	[0.50]	Introduction to Renewable Energy
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

AGR*3500	[0.50]	Experiential Education I
FARE*2700	[0.50]	Survey of Natural Resource Economics
SOIL*3080	[0.50]	Soil and Water Conservation

1.00 electives or restricted electives

##### Semester 6

MET*2020	[0.50]	Agrometeorology
NRS*3000	[0.50]	Environmental Issues in Agriculture and Landscape Management

STAT\*2060 [0.50] Statistics for Business Decisions

1.00 electives or restricted electives

##### Semester 7

FARE*4290	[0.50]	Land Economics
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One of:

NRS*4110	[0.50]	Natural Resources Management Field Camp
SOIL*4250	[0.50]	Soils in the Landscape

1.50 electives or restricted electives

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

##### Semester 8

FARE*4310	[0.50]	Resource Economics
GEOL*3060	[0.50]	Groundwater
GEOG*3420	[0.50]	Remote Sensing of the Environment

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.

ENVS*3410	[0.50]	Independent Research I
ENVS*3420	[0.50]	Independent Research II
ENVS*3430	[1.00]	Independent Research

#### Nutrient Management

ENVB*4020	[0.50]	Water Quality and Environmental Management
PBIO*4100	[0.50]	Soil Plant Relationships
SOIL*3060	[0.50]	Environmental Soil Chemistry
SOIL*3070	[0.50]	Environmental Soil Physics
SOIL*3200	[0.50]	Environmental Soil Biology
SOIL*4090	[0.50]	Soil Management
SOIL*4130	[0.50]	Soil and Nutrient Management

**Natural Resource Management**

ENVB*2030	[0.50]	Current Issues in Forest Science
ENVB*3330	[0.50]	Ecosystem Processes and Applications
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

**Environmental Protection**

BIOC*2580	[0.50]	Introduction to Biochemistry
ENVB*2040	[0.50]	Plant Health and the Environment
ENVB*3030	[0.50]	Pesticides and the Environment
ENVB*3330	[0.50]	Ecosystem Processes and Applications
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****Semester 1 - Fall**

BIOL*1030	[0.50]	Biology I
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 Trends and Issues
SOIL*2010	[0.50]	Soil Science

**Semester 2 - Winter**

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*1050	[0.50]	Equine Facility Management and Design
EQN*1070	[0.50]	Equine Event Management II

**Semester 3 - Fall**

AGR*2030	[0.50]	Pasture Management
ECON*1050	[0.50]	Introductory Microeconomics
EQN*2020	[0.50]	Stable Management
EQN*2040	[0.50]	Equine Anatomy and Physiology

One of

CHEM*1040	[0.50]	General Chemistry I
CHEM*1100	[0.50]	Chemistry Today

**Semester 4 - Winter**

ACCT*2220	[0.50]	Financial Accounting
AGR*2100	[0.50]	Human Resource Management
EQN*2050	[0.50]	Introduction to Equine Nutrition
EQN*2200	[0.50]	Equine Industry Trends and Issues I
FARE*1100	[0.50]	Introduction to Business

**Semesters 5 to 8 offered at the Guelph campus****Semester 5 - Fall**

AGR*2350	[0.50]	Animal Production Systems, Health and Industry
AGR*3500	[0.50]	Experiential Education I
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**

FARE*3310	[0.50]	Operations Management
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2.00 electives

**Semester 8 - Winter**

AGR*4500	[0.50]	Agrifood Industry Problem-Solving
EQN*4020	[0.50]	Feeding the Performance Horse
EQN*4400	[0.50]	Equine Industry Trends and Issues II

1.00 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.