# 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

Contact Information:

University of Guelph

Guelph, Ontario, Canada

N1G 2W1

519-824-4120

http://www.uoguelph.ca

Revision Information:

Date	Description
February 3, 2015	Initial Publication
May 22, 2015	2nd Publication
July 20, 2015	3rd Publication
October 9, 2015	4th Publication
May 11, 2016	5th Publication



# 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) <a href="http://www.e-laws.gov.on.ca/index.html">http://www.e-laws.gov.on.ca/index.html</a>. 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 <a href="http://www.uoguelph.ca/registrar/registrar/rindex.cfm?index.">http://www.uoguelph.ca/registrar/registrar/rindex.cfm?index.</a>

### **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** 

Table of Contents i

# **Table of Contents**

Last Revision: May 11, 2016 2015-2016 Undergraduate Calendar

ii Table of Contents

# **Specializations and Their Degrees**

Specialization Name	Specialization	Honours Program	Honours Program	Honours Program	General Program	Co-op Program
	Acronym	Major	Minor	Area of Emphasis		
Accounting	ACCT	BCOMM				BCOMM
Adult Development	ADEV	BASC				BASC
Agriculture	AGR		BSAG BAS			
Agricultural Science	AGRS	BSAG				
Animal Biology	ABIO	BSC				
Animal Science	ANSC	BSAG				
Anthropology	ANTH	BA	BA BAS		BA	
Applied Human Nutrition	AHN	BASC				
Applied Plant Science	APSC			BSCH.PLSC		
Art History	ARTH	BA	BA BAS			
Biochemistry	BIOC	BSC	BSC BAS			BSC
Biodiversity	BIOD	BSC				
Biological & Medical Physics	ВМРН	BSC				BSC
Biological and Pharmaceutical Chemistry	ВРСН	BSC				BSC
Biological Engineering	BIOE	BENG				BENG
Biological Science	BIOS	BSC			BSC	
Biology	BIOL		BSC BAS			
Bio-Medical Science	BIOM	BSC				
Biomedical Engineering	BME	BENG				BENG
Biomedical Toxicology	BTOX	BSC				BSC
Biotechnology	BIOT		BSC BAS			
Botany	BOT			BSCH.PLSC		
Business Administration	BADM		BA BSC BAS			
Chemical Physics	CHPY	BSC				BSC
Chemistry	CHEM	BSC	BSC BAS			BSC
Child, Youth and Family	CYF	BASC				BASC
Classical Studies	CLAS	BA	BA BAS			
Computer Engineering	CENG	BENG				BENG
Computer Science	CS	BCOMP				BCOMP
Computing					BCOMP	
Computing & Information Science	CIS		BA BSC BAS			
Criminal Justice & Public Policy	СЈРР	BA	BA BAS			
Crop, Horticulture and Turfgrass Sciences	CHAT	BSAG				
Ecology	ECOL	BSES	BSC BAS			BSES
Economic & Business Development	EBD			BAH.ID		
Economics	ECON	BA	BA BAS			BA
Engineering Systems & Computing	ESC	BENG				BENG
English	ENGL	BA	BA BAS		BA	
Environmental Biology	ENVB	BSC				
Environment & Development	EAD			BAH.ID		

Specialization Name	Specialization Acronym	Honours Program Major	Honours Program Minor	Honours Program Area of Emphasis	General Program	Co-op Program
Environmental Economics & Policy	EEP	BSES				
Environmental Engineering	ENVE	BENG	BENG			BENG
Environmental Geoscience & Geomatics	EGG	BSC				
Environmental Governance	EGOV	BA				
Environmental Management	EM	BBRM				
Environment and Resource Management	ERM	BSES				BSES
Environmental Sciences	ENVS	BSES				BSES
Equine Management	EQM	BBRM				
Ethics in Life Sciences	ELS		BA BAS			
European Culture & Civilization	ECC		BA BAS	BAH.EURS		
European Business Studies	EBS			BAH.EURS		
European Studies	EURS	BA				
Family & Child Studies	FCS		BA BAS			
Finance	FIN			BCOMM.MEF		
Food and Agricultural Business	FAB	BCOMM				BCOMM
Food, Agricultural and Resource Economics	FARE	BA				
Food Engineering	FENG		BENG			
Food Science	FOOD	BSC				BSC
French Studies	FREN	BA	BA BAS		BA	
Gender and Development	GAD			BAH.ID		
GIS & Environmental Analysis	GIS		BSC BAS			
Geography	GEOG	BA	BA BAS		BA	
German	GERM		BA BAS			
Hispanic Studies	HISP	BA	BA BAS		BA	
Historical Perspectives in Development	HPD			BAH.ID		
History	HIST	BA	BA BAS		BA	
Hotel & Food Administration	HAFA	BCOMM				BCOMM
Human Kinetics	НК	BSC				
Individual Studies	IS	BA				
Information Systems & Human Behaviour	ISHB	BA				
International Development	ID	BA	BA BAS		BA	
Italian	ITAL		BA BAS			
Landscape Architecture		BLA				
Latin American Studies	LAS			BAH.ID		
Leadership and Organizational Management	LOM	BCOMM				
Marine & Freshwater Biology	MFB	BSC				
Management Economics & Finance	MEF	BCOMM				BCOMM
Marketing Management	MKMN	BCOMM	BA BAS			BCOMM
Mathematical Economics	MAEC	BA				BA
Mathematical Science	MSCI		BSC BAS			
Mathematics	MATH	BA BSC	BA BSC BAS		BA	
Microbiology	MICR	BSC	BAS BSC			BSC

Specialization Name	Specialization Acronym	Honours Program Major	Honours Program Minor	Honours Program Area of Emphasis	General Program	Co-op Program
Mechanical Engineering	MECH	BENG				BENG
Molecular Biology & Genetics	MBG	BSC	BSC BAS			
Museum Studies	MS		BA BAS			
Music	MUSC	BA	BA BAS		BA	
Nanoscience	NANO	BSC				BSC
Neuroscience	NEUR		BSC BAS			
Nutritional & Nutraceutical Sciences	NANS	BSC	BSC BAS			
Organic Agriculture	OAGR	BSAG				
Philosophy	PHIL	BA	BA BAS		BA	
Physical Science	PSCI	BSC			BSC	
Physics	PHYS	BSC	BSC BAS			BSC
Plant Biotechnology	PBTC			BSCH.PLSC		
Plant Environmental Science	PESC			BSCH.PLSC		
Plant Science	PLSC	BSC	BSC BAS			
Political Economy & Administrative Change	PEAC			BAH.ID		
Political Science	POLS	BA	BA BAS		BA	
Psychology	PSYC	BA	BA BAS			BA
Psychology: Brain & Cognition	PBC	BSC	BSC BAS			
Public Management	PMGT	BCOMM				BCOMM
Real Estate & Housing	REH	BCOMM				BCOMM
Rural & Agricultural Development	RAD			BAH.ID		
Sociology	SOC	BA	BA BAS		BA	
Software Engineering	SENG	BCOMP				BCOMP
Statistics	STAT	BA BSC	BA BSC BAS		BA	
Studio Art	SART	BA				
Theatre Studies	THST	BA	BA BAS		BA	
Theoretical Physics	THPY	BSC				
Tourism Management	TMGT	BCOMM				
Veterinary Medicine		DVM				
Water Resources Engineering	WRE	BENG				BENG
Wildlife Biology & Conservation	WBC	BSC				
Zoology	ZOO	BSC	BSC BAS			