

# 2016-2017 Graduate Calendar

The information published in this Graduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2016-2017 academic years, including the Summer Semester 2016, Fall Semester 2016 and the Winter Semester 2017.

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

If you wish to link to the Graduate 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

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The Office of Graduate Studies has attempted to ensure the accuracy of this on-line Graduate Calendar. However, the publication of information in this document does not bind the university to the provision of courses, programs, schedules of studies, fees, or facilities as listed herein.

## Limitations

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The University of Guelph reserves the right to change without notice any information contained in this calendar, including any rule or regulation pertaining to the standards for admission to, the requirements for the continuation of study in, and the requirements for the granting of degrees or diplomas in any or all of its programs.

The 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 the 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.

The University of Guelph reaffirms section 1 of the Ontario Human Rights Code, 1981, which prohibits discrimination on the grounds of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, handicap, age, marital status or family status.

The university encourages applications from women, aboriginal peoples, visible minorities, persons with disabilities, and members of other under-represented groups.

# 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/DBLaws/Statutes/English/90f31\\_e.htm](http://www.e-laws.gov.on.ca/DBLaws/Statutes/English/90f31_e.htm). 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 <https://www.uoguelph.ca/registrar/>

## Statistics Canada - Notification of Disclosure

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For further information, please see Statistics Canada's web site at <http://www.statcan.gc.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.

### 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 the Office of Graduate Studies.

## 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>.



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## Toxicology

The collaborative specialization is the focal point for graduate teaching and research in toxicology. Students wishing to undertake graduate studies at the MSc or PhD level with emphasis on toxicology will be admitted by a participating department and will register in both the participating department and in the collaborative specialization. The participating academic units include the Departments of Animal Biosciences, Biomedical Sciences, Chemistry, Human Health and Nutritional Sciences, Integrative Biology, Mathematics and Statistics, Molecular and Cellular Biology, Pathobiology, Plant Agriculture and the School of Environmental Sciences.

### Administrative Staff

#### Director and Graduate Program Coordinator

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rmanderv@uoguelph.ca

#### Graduate Program Assistant

Karen Ferraro (SCIE 2513, Ext. 53044)  
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### Graduate Faculty

#### Manfred Brauer

Associate Professor, Molecular and Cellular Biology

#### Elena Choleris

Professor, Psychology

#### Beverley Hale

Associate Professor, School of Environmental Sciences

#### Christopher J. Hall

Professor, School of Environmental Sciences

#### M. Anthony Hayes

Professor, Pathobiology

#### Ronald Johnson

Associate Professor, Biomedical Sciences

#### P. David Josephy

Professor, Molecular and Cellular Biology

#### Bettina E. Kalisch

Associate Professor, Biomedical Sciences

#### Niel A. Karrow

Assistant Professor, Animal Biosciences

#### Gordon M. Kirby

Assistant Professor, Biomedical Sciences

#### James B. Kirkland

Assistant Professor, Human Health and Nutritional Sciences

#### Hung Lee

Professor, School of Environmental Sciences

#### Francesco Leri

Professor, Psychology

#### Richard A. Manderville

Associate Professor, Chemistry

#### Linda A. Parker

Professor, Psychology and Canada Research Chair

#### Leonard Ritter

Professor, School of Environmental Sciences

#### Cynthia Scott-Dupree

Associate Professor, School of Environmental Sciences

#### Paul K. Sibley

Assistant Professor, School of Environmental Sciences

#### E. James Squires

Professor, Animal Biosciences

#### Glen J. Van Der Kraak

Professor, Integrative Biology and Associate Dean, Research, CBS

## MSc Collaborative Specialization

### Admission Requirements

MSc students in the collaborative specialization in toxicology must meet the MSc admission requirements of the participating department in which they are enrolled.

### Degree Requirements

MSc students in the collaborative specialization in toxicology must complete a minimum of 1.50 graduate credits, which must include the toxicology courses TOX\*6000 and TOX\*6200 and courses required by the participating department in which they are enrolled. TOX\*6000 may be waived for students whose undergraduate degree included significant training in toxicology.

## PhD Collaborative Specialization

### Admission Requirements

PhD students in the collaborative specialization in toxicology must meet the PhD admission requirements of the participating department in which they are enrolled.

### Degree Requirements

PhD students in the collaborative specialization in toxicology must meet all the academic requirements specified by the participating department in which they are enrolled. They must also complete the courses TOX\*6000 and TOX\*6200 if they, or equivalent courses, were not taken as part of an MSc program.

### Courses

TOX*6000 Advanced Principles of Toxicology S [0.50]		
An intensive course in the principles of modern aspects of toxicology, taught in a lecture/case study format.		
<i>Department(s):</i> Department of Chemistry		
TOX*6200 Advanced Topics in Toxicology W [0.50]		
Advanced topics in toxicology will include oral presentations by students, faculty members, and guest lecturers. The emphasis will be on advanced concepts and techniques in toxicology research with particular relevance to mechanistic, molecular and interpretive toxicology.		
<i>Restriction(s):</i> Credit may be obtained for only one of TOX*6200 or TOX*4200		
<i>Department(s):</i> Department of Chemistry		
TOX*6590 Biochemical Toxicology F [0.50]		
The molecular mechanisms of action of carcinogens and other toxic compounds. Enzymes of biotransformation, including a detailed study of cytochrome P-450. Interactions of reactive species with DNA and other macromolecules. (Credit may be obtained for only one of TOX*4590 and TOX*6590).		
<i>Department(s):</i> Department of Chemistry		

### Other courses

BIOM*6721	[0.25]	Special Topics in Pharmacology-Toxicology
BIOM*6722	[0.50]	Special Topics in Biomedical Pharmacology-Toxicology
CHEM*7310	[0.50]	Selected Topics in Biochemistry
CHEM*7600	[0.50]	Selected Topics in Organic Chemistry