# 2017-2018 Graduate Calendar

The information published in this Graduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2017-2018 academic years, including the Summer Semester 2017, Fall Semester 2017 and the Winter Semester 2018.

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

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

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.

### **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/DBLaws/Statutes/English/90f31\_e.htm">http://www.e-laws.gov.on.ca/DBLaws/Statutes/English/90f31\_e.htm</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="https://www.uoguelph.ca/registrar/">https://www.uoguelph.ca/registrar/</a>

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

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

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.

#### **Home Address**

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

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 <a href="http://www.uoguelph.ca/policies">http://www.uoguelph.ca/policies</a>.

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## Food Safety and Quality Assurance

The interdepartmental program is the focal point for graduate teaching and research in food safety and quality assurance. The MSc program in food safety and quality assurance is intended to prepare food scientists, food engineers, veterinarians and others with appropriate scientific backgrounds for participation in food safety monitoring and maintenance in the food industry and in government. Students wishing to undertake graduate studies at the MSc level with emphasis on food safety and quality assurance will enter the program through a participating department. The participating academic units are Biomedical Sciences, Marketing and Consumer Studies, Environmental Biology, Food Science, Pathobiology, Population Medicine, and Engineering.

#### Administrative Staff

#### Chair

Art Hill (112 Food Science, Ext. 53875) arhill@uoguelph.ca

#### **FSQA Graduate Program Coordinator** Jeffrey Farber (202 CRIFS, Ext. 56101)

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#### **Graduate Faculty**

Shai Barbut Professor, Food Science Benjamin Bohrer Professor, Food Science

Lisa Duizer Associate Professor, Food Science

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Arthur R. Hill Professor and Chair, Food Science

Iris Joye Professor, Food Science

**Gisele LaPointe** Professor, Food Science

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Associate Professor, Food Science Alejandro G. Marangoni

Professor, Food Science

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Professor, Population Medicine

Don Mercer

Professor, Food Science

**Yoshinori Mine** Professor, Food Science

Andrew Papadopoulos

Associate Professor, Population Medicine

Michael Rogers

Associate Professor, Food Science Paul Spagnuolo Professor, Food Science

Keith Warriner Professor, Food Science

#### **Associated Graduate Faculty**

Mansel Griffiths Food Science Anne Wilcock Food Science

## MSc Program

#### **Admission Requirements**

The program is most suitable for those with an undergraduate science background or for those currently employed in the food area in government regulatory work or in the processing industry who desire upgrading of skills and knowledge. Applicants for admission to this program must meet the university minimum admission requirement of a baccalaureate in an honours program (or the equivalent) or a DVM from a recognized university or college with an average standing of at least a 'B-' average. Applicants will be expected to have completed undergraduate courses that prepare them for participation in the core graduate courses and electives of the program. Undergraduate upgrading may be necessary to ensure sufficient background in topics such as microbiology, toxicology, statistics, and analytical methods.

#### **Degree Requirements**

Completion of the MSc FSQA program requires a minimum of eight courses (or 4.5 credits) acceptable for graduate credit. This includes the seminar course which has a value of 0.5 credit. All students must complete:

FSQA*6000	[0.50]	Food Safety and Quality Assurance Seminar	
FSQA*6500	[1.00]	Food Safety and Quality Assurance Research Project	
This project is equal to 1.0 credit and counts as one course of the eight required courses.			
FSQA*6600	[0.50]	Principles of Food Safety and Quality Assurance	
FSQA*6150	[0.50]	Food Quality Assurance Management	
At least four additional courses, in consultation with the student's advisory committee.			

Suitable courses are listed below. Other courses, not listed here, also may be considered. Up to two senior undergraduate courses can be taken. The courses selected will depend upon the student's background, specialty, interest and area of project research. The normal duration of the program will be three to four full-time semesters.

#### Graduate Diploma

#### Admission Requirements

The program is most suitable for those with an undergraduate science background or for those currently employed in the food area in government regulatory work or in the processing industry who desire upgrading of skills and knowledge. Applicants for admission to this program must meet the university minimum admission requirement of a baccalaureate in an honours program (or the equivalent) or a DVM from a recognized university or college with an average standing of at least a 'B-'average. Applicants will be expected to have completed undergraduate courses that prepare them for participation in the core graduate courses and electives of the program. Undergraduate upgrading may be necessary to ensure sufficient background in topics such as microbiology, toxicology, statistics, and analytical methods.

#### **Diploma Requirements**

All students must complete the following five courses:

FSQA*6100	[0.50]	Food Law and Policy
FSQA*6150	[0.50]	Food Quality Assurance Management
FSQA*6200	[0.50]	Food Safety Systems Management
FSQA*6600	[0.50]	Principles of Food Safety and Quality Assurance
POPM*6350	[0.50]	Safety of Foods of Animal Origins
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#### **Collaborative Specializations**

#### Toxicology

The MSc in Food Safety and Quality Assurance participates in the collaborative specialization in toxicology. The faculty members' research and teaching expertise includes aspects of toxicology; they may serve as advisors for MSc.

Please consult the Toxicology listing for a detailed description of the MSc collaborative specialization.

#### Courses

FSQA*6000 Food Safety and Quality Assurance Seminar F [0.50]		
Provides experiential training in forms of communication that are likely to be required in professional or academic careers in food science and technology.		
1	This course is open only to students in the MSc FSQA program. Department of Food Science	
FSQA*6100 Food Law and Policy F [0.50]		

The fundamentals of food policy development and Canadian and international food law are learned and practiced through online presentations, independent study and online interactions with other students and industry professionals.

Offering(s): Offered through Distance Education format only. Department(s): Department of Food Science

FSQA*6150 Foo	od Quality Assurance Management W [0.50]
Examination and	d review of principles and concept of quality assurance and their
application to c	onsumer products and services. Topics include applied aspects of
total-quality mar	agement principles.
Offering(s):	Offered through Distance Education format only.
Department(s):	Department of Food Science
FSQA*6200 Food Safety Systems Management W [0.50]	

Food safety systems are studied in four modules. (1) A brief review of plant hygiene and HACCP principles. Students with insufficient background will do supplemental study in these areas; (2) HACCP implementation and verification; (3) HACCP-based food safety programs in Canada; and (4) International Food Safety Management Systems. *Offering(s):* Offered through Distance Education format only.

Department(s): Department of Food Science

#### FSQA\*6500 Food Safety and Quality Assurance Research Project S,F,W [1.00]

An original research project related to food safety and quality assurance which includes the preparation of a written report suitable for publication and an oral presentation of the findings to the graduate faculty.

Department(s): Department of Food Science

#### FSQA\*6600 Principles of Food Safety and Quality Assurance F [0.50]

An integrated approach to factors affecting food safety and quality including microbial and chemical contamination is provided. Major food-borne disease outbreaks are studied as examples. Modern methods of quality management to minimize contamination of processed foods is discussed.

 Offering(s):
 Offered through Distance Education format only.

 Department(s):
 Department of Food Science

#### Other Graduate Courses Suitable for Credit in this Program

#### Food Science

	E00D*(100	10 501	Advances in Food Science		
	FOOD*6190	[0.50]			
	FOOD*6710	[0.25]	Special Topics in Food Chemistry		
	FOOD*6720	[0.25]	Special Topics in Food Microbiology		
	FOOD*6730	[0.25]	Special Topics in Food Physics		
	FOOD*6740	[0.25]	Special Topics in Food Processing		
	FOOD*6750	[0.25]	Special Topics in Food for Health		
	FOOD*6760	[0.25]	Special Topics in Food Quality		
	Human Heath	and Nutri	tional Sciences		
	HHNS*6400	[0.50]	Functional Foods and Nutraceuticals		
	HHNS*6410	[1.00]	Applied Functional Foods and Nutraceuticals		
	Pathobiology				
	PABI*6000	[0.50]	Bacterial Pathogenesis		
	PABI*6550	[0.50]	Epidemiology of Zoonoses		
	Population Medicine				
	POPM*6200	[0.50]	Epidemiology I		
	POPM*6210	[0.50]	Epidemiology II		
	POPM*6350	[0.50]	Safety of Foods of Animal Origins		
	Plant Agricultu	re			
	PLNT*6110	[0.50]	Fruit and Vegetable Technology		
	Undergradua	te Cours	es Suitable for Credit in this Program		
	Food Science				
	FOOD*3030	[0.50]	Food Chemistry I		
	FOOD*4120	[0.50]	Food Analysis		
	FOOD*4090	[0.50]	Functional Foods and Nutraceuticals		
	Human Health	and Nutr	itional Sciences		
	NUTR*4510	[0.50]	Toxicological Aspects of Nutrition		
Population Medicine					
	POPM*4040	[0.50]	Epidemiology of Food-Borne Diseases		