2010-2011 Graduate Calendar

The information published in this Graduate Calendar outlines the rules, regulations, curricula, programs and fees for the 2010-2011 academic years, including the Fall Semester 2010, the Winter Semester 2011 and the Summer Semester 2011.

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

Contact Information:

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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) 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 http://www.uoguelph.ca/registrar/index.cfm?index.

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 http://www.uoguelph.ca/policies.

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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 and Graduate Coordinator Keith Warriner (126 Food Science, Ext. 56072) kwarrine@uoguelph.ca Graduate Secretary Kay Norwell (114 Food Science, Ext. 52183) knorwell@uoguelph.ca

Graduate Faculty

Shai Barbut Professor, Food Science Herman J. Boermans Associate Professor, Biomedical Sciences Milena Corredig Professor, Food Science Valerie J. Davidson Professor, Engineering H. Douglas Goff Professor, Food Science Mansel W. Griffiths Professor, Food Science Arthur R. Hill Professor and Chair, Food Science Yukio Kakuda Associate Professor, Food Science Robert W. Lencki Associate Professor, Food Science Alejandro G. Marangoni Professor, Food Science Massimo Marcone Associate Professor, Food Science S. Wayne Martin Professor, Population Medicine Scott A. McEwen Professor, Population Medicine Gauri S. Mittal Professor, Engineering Peter Purslow Professor, Food Science Koushik Seetharaman Associate Professor, Food Science Jack T. Trevors Professor, Environmental Biology **David Waltner-Toews** Professor, Population Medicine Keith Warriner Associate Professor, Food Science Anne Wilcock Associate Professor, Marketing and Consumer Studies **Rickey Y. Yada** Professor, 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 second-class honours ('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 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. At least one course must be taken from each of three of the participating departments, including the department in which the student is registered. 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 second-class honours ('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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Courses

FSQA*6000 Food Safety and Quality Assurance Seminar U [0.50] Provides experiential training in forms of communication that are likely to be required

Provides experiential training in forms of communication that are likely to be required in professional or academic careers in food science and technology.

Restriction(s): Credit many only be obtained for one of FSQA*6000 or FOOD*6300.

FSQA*6150 Food Quality Assurance Management W [0.50]

Examination and review of principles and concept of quality assurance and their application to consumer products and services. Topics include applied aspects of total-quality management principles.

Restriction(s): Offered by distance education only.

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. *Restriction(s):* Offered by distance education only.

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FSQA*6500 Food Safety and Quality Assurance Research Project U [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.

FSQA*6600 Principles of Food Safety and Quality Assurance S [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.

Restriction(s): Offered by distance education only.

Other Graduate Courses Suitable for Credit in this Program

Biomedical Sciences

| BIOM*6440 Engineering | [0.50] | Biomedical Toxicology |
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| ENGG*6110 | [0.50] | Food and Bio-Process Engineering |

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| ENGG*6160 | [0.50] | Advanced Food Engineering | |
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| Food Science | | | |
| FOOD*6190 | [0.50] | Advances in Food Science | |
| FOOD*6220 | [0.50] | Advanced Food Analysis Methodology | |
| FOOD*6280 | [0.50] | Rapid Methods in Food Microbiology | |
| FOOD*6300 | [0.50] | Food Science Communication | |
| FOOD*6600 | [0.50] | Advanced Food Microbiology | |
| Human Heath and Nutritional Sciences | | | |
| HHNS*6400 | [0.50] | Functional Foods and Nutraceuticals | |
| Pathobiology | | | |
| PABI*6000 | [0.50] | Bacterial Pathogenesis | |
| PABI*6550 | [0.50] | Epidemiology of Zoonoses | |
| Population Me | edicine | | |
| POPM*6200 | [0.50] | Epidemiology I | |
| POPM*6210 | [0.50] | Epidemiology II | |
| POPM*6350 | [0.50] | Safety of Foods of Animal Origins | |
| Undergradua | ate Cours | ses 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 | Human Health and Nutritional Sciences | | |
| NUTR*4510 | [0.50] | Toxicological Aspects of Nutrition | |
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Population Medicine

| POPM*4040 | [0.50] | Epidemiology of Food-Borne Diseases |
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