Course Outline

Safety of Foods of Animal Origin
POPM*6350

Note: In Fall 2007, this course is available in Distance Format only (see http://www.open.uoguelph.ca/offerings/offering.cfm?id=1931)

Introduction

The goals of this course are to study the principles and practice of food safety, with emphasis on foods of animal origin. The detection, epidemiology, human health risk and control of hazards in foods will be discussed. This course will be multidisciplinary, with emphasis on the microbiological, chemical, esthetic and toxic hazards in foods. This course is designed to assist individuals engaged in food safety activity in protecting the public health from hazards in foods.

Graduate Calendar Description.

POPM*6350 Safety of Foods of Animal Origins F [0.50]. The detection, epidemiology, human health risk, and control of hazards in food of animal origin.

About the Instructor

My name is Scott McEwen. I obtained my DVM and Doctor of Veterinary Science degrees from the University of Guelph. I am currently a Professor in the Department of Population Medicine, Ontario Veterinary College. My research focuses on the epidemiology of foodborne infections in food animal populations, particularly E. coli and antibiotic resistant organisms, but also Salmonella and other pathogens. Since 1986 I have taught food safety to veterinary students and graduate students in a variety of degree programs and have been the principal research advisor of over 25 graduate students. I am author or co-author of over 130 publications in refereed scientific journals and have delivered invited research
presentations in nine countries. I serve on several national and international public health and food safety committees and boards.

Objectives

At the end of this course, graduate students will be able to:

1. List important microbiological, chemical and physical hazards that may occur in foods, and describe their implications to human health.

2. Identify and describe the sources of hazards in foods, factors affecting multiplication or reduction in exposure to humans, and methods of inspection and control.

3. Analyse and interpret basic qualitative food safety data, draw conclusions and formulate recommendations.

4. Work with others to evaluate the food safety perspectives of various participants in the farm-to-fork continuum and to synthesis optimal food safety strategies.

Resources

Required textbook: (available in electronic format from the University of Guelph Library. Electronic resource call number: TP373.5)


Required readings: Several readings are provided in the course reader. These are organized by module number.

Websites: References to several websites are provided in the course modules.

Learning Strategies

The course is available in distance format only. It is divided into 12 modules that correspond to weeks in the semester. Each module contains learning objectives which are achieved by reading the assigned book chapters and articles, performing the specific activities, participating in weekly online discussions, and by completing the individual and group assignments. The module activities and assignments include exercises to develop skills in problem identification and solving, debate, qualitative risk characterization, data analysis, synthesis and consensus building.
Course Structure

<table>
<thead>
<tr>
<th>Week</th>
<th>Module Title</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>General overview and production chain for foods of animal origin</td>
</tr>
<tr>
<td>2</td>
<td>Farm to fork food safety</td>
</tr>
<tr>
<td>3</td>
<td>Characterization of food risks</td>
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<tr>
<td>4</td>
<td>Food safety surveillance systems</td>
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<tr>
<td>5</td>
<td>Biological hazards – bacteria</td>
</tr>
<tr>
<td>6</td>
<td>Biological hazards – parasites, viruses and prions</td>
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<tr>
<td>7</td>
<td>Chemical hazards</td>
</tr>
<tr>
<td>8</td>
<td>Systems for risk management – pre-harvest</td>
</tr>
<tr>
<td>9</td>
<td>Systems for risk management – post-harvest; slaughter &amp; primary processing; raw meat &amp; poultry</td>
</tr>
<tr>
<td>10</td>
<td>Food safety policy</td>
</tr>
<tr>
<td>11</td>
<td>Systems for risk management – post-harvest: further processing, retail &amp; food service</td>
</tr>
<tr>
<td>12</td>
<td>Integrated pathogen reduction programs and international programs</td>
</tr>
</tbody>
</table>

Where to get started with this course

Your course website acts as your classroom. You will need to visit the course website a minimum of 3-5 times per week to find out what to do, get help and talk to your instructor and your classmates. A good place to begin is here with the Course Outline. You also need to visit the Coursework timeline (where you will be able to access weekly Modules / Units which guide you through the course). The Resources section of the course website has useful links relating to the course. If you have any questions you can ask them in the Main conference area.

Conference Use and Expectations

1. **Introductions**: Here you will introduce yourself to your class. Tell us what you hope to learn by taking this course and anything else that you are comfortable sharing.

2. **Main Class**: Use this conference for course-related inquiries. I will post weekly discussion questions here, post answers to weekly activity
assignments, and I will always read this Conference. This is where you go to ask me questions.

3. **Group Discussions**: Use these conferences to collaborate with your group members as mentioned below.

4. **Coffee Shop**: Relax, chat and talk about non-course related things.

5. **Help**: Technical help staff ready to answer your computer conferencing questions will monitor this conference on a daily basis.

6. **Test**: Use this conference to learn about the course conferencing system, and to practice sending and receiving messages. Test is a practice conference common to all web-based courses running this semester.

If you do not see your group assignment in the Class List please check with the Help Desk (LINK to contact info for Help Desk)

Information on navigating and using the conferencing system is available in the online help pages.

The University of Guelph has an Acceptable Use policy which you are expected to adhere to. For full details on the University Acceptable use Policy click here (http://www.uoguelph.ca/web/aupg.shtml).

You can find assistance with “How to Post Good Messages” here (LINK).

**Course Website Use**

| Each time you log onto this course it is your responsibility to read the News on the Updates page for announcements posted by your professor |

Remember that if you have questions regarding the assignments or anything else you can post it in the “Questions” topic of the Main Class Conference.
**Time Management Tip**

If this is your first online course you may want to give some thought to a routine for the 3-5 times per week that you are expected to log on to your course website. An example follows.

1. Read the News from your Professor on the Updates page
2. Read and respond to Conference messages
3. Check the Timeline for what needs to be read and what you should be working on
4. Work through the sections of the Module for the week
5. Consult the course Outline re assignments to work on

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**Assessment**

<table>
<thead>
<tr>
<th>Assignment #</th>
<th>Title</th>
<th>Date Due</th>
<th>Grade (% of course)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Flow diagram for a food commodity (Individual)</td>
<td>Sept. 23, midnight</td>
<td>10%</td>
</tr>
<tr>
<td>2</td>
<td>Capstone project</td>
<td>Topics selected week 3 (deadline Sept 30 midnight); paper due Nov. 28 midnight</td>
<td>35%</td>
</tr>
<tr>
<td>3</td>
<td>Debate (Group)</td>
<td>Debate week 4; report due Oct. 21 midnight</td>
<td>10%</td>
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<tr>
<td>4</td>
<td>Exposure assessment (Individual)</td>
<td>Oct. 14 midnight</td>
<td>10%</td>
</tr>
<tr>
<td>5</td>
<td>Hazard Identification / characterization (Individual)</td>
<td>Oct 28 midnight</td>
<td>10%</td>
</tr>
<tr>
<td>6</td>
<td>Food safety policy (Group)</td>
<td>Group postings due Nov 18 midnight; Policy Meeting and</td>
<td>15%</td>
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<tr>
<td>follow-up postings</td>
<td>Week 11</td>
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<tr>
<td>7</td>
<td>Participation in discussion (Individual)</td>
<td>Report due Dec 2 midnight</td>
<td></td>
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<tr>
<td></td>
<td>Student summary (5%) Monitored discussion (5%)</td>
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**Field Trip**

Optional field trips to beef and poultry slaughterhouses will be organized for those that wish to attend, probably in weeks 9 or 10. The purpose of the trips is to observe beef and poultry slaughter, carcass dressing, inspection, pathogen reduction measures, and post-harvest HACCP activities.

**Policies**

**Academic Misconduct /Plagiarism**

Although students are encouraged to share thoughts and ideas while studying for the course, all material submitted for grading must be each student’s own work. For clarification on Academic Misconduct, please refer to the University of Guelph's Undergraduate Calendar or the Open Learning Program Student Handbook. Please see the Univeristy Academic Integrity resources at this link [http://www.webshops.uoguelph.ca/AcademicIntegrity/](http://www.webshops.uoguelph.ca/AcademicIntegrity/).

**Late Submission of Assignments**

Grades for late assignments will be deducted at the rate of 10% of the total per day.

**Policies on Groupwork**

There are two group assignments in this course. For each assignment, groups are required to form a group contract to bring clarity and accountability to tasks and responsibilities. Among others, the contracts should include:

- How the workload will be distributed
- How the group will work collaboratively
- Who will find data / research
- Who will review information
- The tasks that are to be completed
- When they should be completed
- Who will complete the tasks
- Who will summarize the discussion
Assignment Submission and Return Policies
All assignments for this course will be submitted electronically via the course website through the Submit tab at the top of the screen. Please save your text documents as Rich Text Format (LINK) before you submit them.

Please ensure that you include a cover sheet for your assignment. It is available here (LINK).

Setup Tip
Start a new file in your word processor and save it as (the number of the assignment) e.g. #1_LastName_FirstName.rtf. Using this system Jane Doe's first assignment would be saved as #1_Doe_Jane.rtf.

Return of Graded Assignments
Unofficial assignment marks will be available in the Grade section of the course website.

Feedback on assignments will be returned online via the Grades tab or the electronic drop box under the Submit tab (see the menu bar at the top of the screen).

DE Handbook
Please ensure that you have reviewed the Learner Services and Resources tab at the top of the Login page for all relevant and important information as well as the DE Handbook (available from the tab at the top of this page) and, if relevant, the Open Learning program handbook located on the same page. In particular, ensure that you review the sections that pertain to Assignment Submissions and Returns.

Learning Resources
Some distance courses may have assignments that require access to resources other than those included in the course materials. Our demographic information tells us that most of our registered distance education students have access to library resources suitable for completing these assignments. However, we also realize that for some of you, it is quite difficult to access books, journals, and other resources that would help you successfully complete your assignments. When you receive your course materials, please check your assignment resource requirements. Then, if due to your geographic isolation you do not have access to the required resources, please contact our office at the beginning of the semester, and we will work with you to find a solution. We are here to help you succeed.
Please contact:
Mary Kormanitsky
Office of Open Learning
(519) 824-4120 ext. 56050
Email: mkorman@open.uoguelph.ca

Problems, Questions, Comments

Faculty Member:

Office Location: Room 201, OVC Clinical Research Building, University of Guelph

Phone #: 519-824-4120 ext 54751

Office Hours: 08:30-4:45 Monday-Friday

Telephone Policies: Call anytime; leave a message if no answer.

Appointments Necessary for telephone or other? No, but best to email first.

Email Address: smcewen@uoguelph.ca

Instructor website URL:
http://www.ovc.uoguelph.ca/popmed/faculty/mcewen.shtm

Department and its Location: Population Medicine, OVC Clinical Research Building (location available on campus map http://www.uoguelph.ca/campus/map/ )

Department Phone #: 519-824-4120 ext 54780 (Mary Elliott, secretary)

Department URL: http://www.ovc.uoguelph.ca/popmed/

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