Course Outline

Credits: (3-0:0-0)

Credit Hours: 3

Instructor: John Thoroski, Dept. of Food Science (Available during normal working hours)
Room 006A – Dairy Science Building
Room 203 – Ellis Building
Phone # 204 474 9332
E Mail – John.Thoroski@umanitoba.ca

Prerequisites: Food Microbiology 1 (FOOD 4150) or permission from instructor

Description: This course covers the principles related to hazard analysis and critical control points (HACCP), a food safety and self-inspection system that is widely used and endorsed internationally by industry, regulatory agencies, and consumer groups.

Learning Objectives: Upon completion of this course students should be able to:

1. Describe the vocabulary, evolution and history of food quality control programs which provide a basis for the HACCP system.

2. Review and understand all of the steps (including the HACCP principles) involved in the application of a working HACCP system. This will be accomplished by classroom demonstrations, the examination of models, and working through the class project.

3. Implement a working HACCP plan.

4. Understand and illustrate how HACCP principles apply to food processing, food service and on-farm production using specific examples.

5. Instruct and guide others on the implementation of a HACCP plan.

Texts: There are no required texts. Computer generated notes will be provided by the instructor. HACCP related topics from trade and scientific journals may also serve as required reading. The Food Safety Enhancement Program Implementation Manuals published by the Canadian Food Inspection Agency will be used as the basis for the course.
Subject Outline

1. Introduction: Definitions, Responsibilities, HACCP, QMP, FSEP, SQF, other quality systems and regulatory issues.

2. Prerequisite programs (GMPs):

   - Premises
   - Transportation and storage
   - Equipment
   - Personnel
   - Sanitation and pest control
   - Recall
   - Operational Prerequisite Programs

3. Getting Ready for HACCP Implementation

   - Assemble the HACCP team
   - Describe the product
   - Intended use and distribution
   - Develop a flow diagram
   - Verify flow diagram
   - Draw a plant schematic

4. HACCP principles

   - Conduct a hazard analysis
   - Determine critical control points (CPP)
   - Establish critical limits
   - Establish monitoring procedures
   - Establish Corrective actions
   - Establish verification procedures
   - Establish record-keeping and documentation procedures

5. Application of Prerequisite Programs and HACCP principles to food processing through group project

6. HACCP case studies using generic models and class project HACCP Plans (includes audit procedures)
Evaluation:

- Midterm: 20%
- Quizzes: 10%
- HACCP Project and presentation: 20%
- Attendance: 10%
- Final examination: 40%

Grades:

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<tr>
<td>A+</td>
<td>90-100</td>
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<td>80-89.9</td>
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Class Attendance: Attendance will be monitored and graded as listed above.

Evaluative Feedback: This will be both formative and summative. Each quiz and midterm test will be reviewed and discussed in the subsequent class. Class project feedback and suggestions will be ongoing during the time required for completion. The evaluation of the class project will be completed within 7 working days after submission and carried out according to current auditing practices within the food industry. Feedback and evaluation detail will be available upon request.

Schedule for Tests and Class Project:
- October 5th – Quiz #1
- October 26th – Mid Term Exam
- November 2nd – Initiation of Class Project
- November 23rd – Quiz #2
- December 7th – Class Project Due Date
- Final Exam Date To Be Determined

- Late assignments will be downgraded. Missed tests must be completed and may be rescheduled with the consent of the Instructor.

Electronic Equipment: Electronic equipment (IPhone, laptop, notebook, etc.) is permitted during regular class time providing it does not disrupt other students. This equipment is not permitted during quizzes, tests, or exams.

Students With Disabilities: Students with disabilities are encouraged to contact Student Disability Services in order to facilitate the implementation of accommodations. The Instructor will be available to meet with Students to discuss the accommodations recommended by Student Disability Services.
Policy on Plagiarism and Cheating (from University Calendar)

“Plagiarism or any other form of cheating in examinations, term tests or academic work is subject to serious academic penalty (e.g. suspension or expulsion from the faculty or university). Cheating in examinations or tests may take the form of copying from another student or bringing unauthorized materials into the exam room (e.g., crib notes, pagers or cell phones). Exam cheating can also include exam impersonation. (Please see Section 4.2.8 on Exam Personation). A student found guilty of contributing to cheating in examinations or term assignments is also subject to serious academic penalty.

To plagiarize is to take ideas or words of another person and pass them off as one’s own. In short, it is stealing something intangible rather than an object. Plagiarism applies to any written work, in traditional or electronic format, as well as orally or verbally presented work. Obviously it is not necessary to state the source of well known or easily verifiable facts, but students are expected to appropriately acknowledge the sources of ideas and expressions they use in their written work, whether quoted directly or paraphrased. This applies to diagrams, statistical tables and the like, as well as to written material, and materials or information from Internet sources.

To provide adequate and correct documentation is not only an indication of academic honesty but is also a courtesy which enables the reader to consult these sources with ease. Failure to provide appropriate citations constitutes plagiarism. It will also be considered plagiarism and/or cheating if a student submits a term paper written in whole or in part by someone other than him/herself, or copies the answer or answers of another student in any test, examination, or take-home assignment.

Working with other students on assignments, laboratory work, take-home tests, or on-line tests, when this is not permitted by the instructor, can constitute Inappropriate Collaboration and may be subject to penalty under the Student Discipline By-Law.

An assignment which is prepared and submitted for one course should not be used for a different course. This is called “duplicate submission” and represents a form of cheating because course requirements are expected to be fulfilled through original work for each course.

When in doubt about any practice, ask your professor or instructor.”