

COURSE SYLLABUS

Course number: PubH 7216-101 #89048

Course title: Food Safety Risk Management

Credits: 1.0

Course meeting times:	Tuesday, 5/31; 9:30am - 12:30pm Wednesday, 6/1; 9:30am - 12:30pm Thursday, 6/2; 8:00am - 12:00pm Friday, 6/3; 8:00am - 12:00pm
Instructor:	Craig W. Hedberg, PhD Associate Professor
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I. Course Description

Foodborne diseases continue to be a major public health problem. Current systems of food production cannot deliver a risk-free food supply. Risk assessment tools provide a basis for managing risks in an informed way in terms of production and regulation of the food supply. This course examines strategies for managing risk for specific foods and across the food system, within the context of current and proposed food safety laws.

II. Learning Objectives

Upon completion of this course, students will be able to:

1. Describe how risk assessment tools provide a basis for managing risks.
2. Describe how Good Agricultural Practices (GAP), Good Manufacturing Practices (GMP), and Good Hygiene Practices (GHP) are used to manage risks.
3. Describe the principles and application of Hazard Analysis and Critical Control Point (HACCP).
4. Identify foods for which the use of terminal treatments, such as thermal pasteurization and irradiation, is necessary to control microbiological hazards.
5. Promote the understanding of risk management as an ongoing activity that requires active participation of senior executives in the food system.

III. Methods of Instruction and Work Expectations

Lectures, discussions, and group exercises are used to present models for developing effective risk management systems. Outside speakers and discussions highlight the appropriate use and limitations

of various management strategies and control measures; including an evaluation of how the structure of the food safety regulatory system affects corporate and national risk management strategies.

Course grading will be determined on the basis of:

- class participation (50 points, 20% of grade)
- a multiple-choice examination (100 points, 40% of grade), and
- a written assignment due within one week of the last day of class (100 points, 40% of grade).

IV. Grading

1. **Grading Criteria:** This course is offered A/F or S/N

- A/F letter grade will be determined by total effort as follows:

A = 95-100%	(4.0) Represents achievement that is outstanding relative to the level necessary to meet course requirements.
A- = 90-94%	
B+ = 87-89%	
B = 83-86%	(3.0) Represents achievement that is significantly above the level necessary to meet course requirements.
B- = 80-82%	
C+ = 77-79%	
C = 73-76%	(2.0) Represents achievement that meets the minimum course requirements.
C- = 70-72%	
F =	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.

- S/N option must complete all assignments to a C- level (70%):

S	Achievement that is satisfactory will be expected to complete all assignments and receive a minimum of 70% to receive a passing score (achievement required for an S is at the discretion of the instructor but may be no lower than a 70%).
F	Represents failure (or no credit) and signifies that the work was either (1) completed but at a level of achievement that is not worthy of credit or (2) was not completed and there was no agreement between the instructor and the student that the student would be awarded an I.

2. **Grading Option** - Students may change grading options during the initial registration period or during the first two days of the term. The grading option may not be changed after the second day of class.

3. **Course Incomplete** - An incomplete grade is permitted only in cases of extraordinary circumstances and following consultation with the instructor. In such cases and "I" grade will require a specific written agreement between the instructor and the student specifying the time and manner in which the student will complete the course requirements. Extension for completion of the work will not exceed one year.

4. **Scholastic Dishonesty** - This course follows the University of Minnesota Board of Regents' policy on student conduct and scholastic dishonesty which can be found at:

<http://www1.umn.edu/regents/policies/academic/StudentConductCode.pdf>

A grade of "F" or "N" for the entire course will be assigned for scholastic dishonesty as defined in the policy and will be reported to the Office of Student Judicial Affairs
<http://www.sja.umn.edu/>

Plagiarism is an important element of this policy. It is defined as the presentation of another's writing or ideas as your own. Serious, intentional plagiarism will result in an "F" or "N" grade for this course. For more information on this policy and for a helpful discussion of preventing plagiarism, please consult University policies and procedures regarding academic integrity:
<http://cisw.cla.umn.edu/plagiarism/uofmpolicies.html>

Students are urged to be careful that they properly attribute and cite others' work in their own writing. For guidelines for correctly citing sources, go to <http://tutorial.lib.umn.edu/>. In addition, original work is expected in this course. It is unacceptable to hand in assignments for this course for which you received credit in another course unless by prior agreement with the instructor. Building on a dissertation or final project is acceptable.

If you have any questions, consult the instructor.

V. Course Withdrawal

School of Public Health Students may withdraw from a course **through the second day** of the course without permission. No "W" will appear on the transcript. After the second day, students are required to do the following:

- The student must contact and notify their advisor and course instructor informing them of the decision to withdraw from the course.
- The student must send an email to the SPH Student Services Center (SSC). The email must provide the student name, ID#, course number, section number, semester, and year with instructions to withdraw the student from the course, and acknowledgement that the instructor and advisor have been contacted.
- The advisor and instructor must email the SSC acknowledging the student is canceling the course. All parties must be notified of the student's intent.
- The SSC will complete the process by withdrawing the student from the course after receiving all emails (student, advisor and instructor). A "W" will be placed and remain on the student transcript for the course.
- After discussion with their advisor and notification to the instructor, students may withdraw until the end of the second day of class. There is no appeal process.

VI. Disabilities

Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the instructor and Disability Services at the beginning of the term. All discussions remain confidential. For further information contact the University of Minnesota Disability Services website at <http://ds.umn.edu/> or call 612-626-1333 (V/TTY).

VII. Course Text and Readings

There is no text for this course.

Readings include the following published articles available from the listed websites. Students should go to the websites via the link provided to download the materials required for this course.

Managing Food Safety: Use of Performance Standards and Other Criteria in Food Inspection Systems. An Authoritative Report of the Institute of Food Technologists
http://www.ift.org/pdfs/scitech/managing_food_safety.pdf

FDA web-site on HACCP:
<http://www.cfsan.fda.gov/~lrd/haccp.html>

USDA web-site on HACCP:
http://www.fsis.usda.gov/Science/HACCP_Models/index.asp

FDA Report on the Occurrence of Foodborne Illness Risk Factors in Selected Institutional Foodservice, Restaurant, and Retail Food Store Facility Types (2004)
<http://www.cfsan.fda.gov/~dms/retrsk2.html>

Safe Food Act 2005
<http://www.senate.gov/> find Senate file S729.

VIII. Course Outline/Weekly Schedule

Tuesday, 5/31; 9:00am - 12:00pm	<ul style="list-style-type: none">• Relationships between risk assessment and risk management• Overview of risk management strategies; standard operating procedures; good practices; HACCP; and terminal control treatments• Overview of existing and proposed food safety legislation• Assignment of groups to review risk management strategies for specific foods, with respect to potential impact of proposed food safety legislation
Wednesday, 6/1; 8:00am - 12:00pm	<ul style="list-style-type: none">• Review of risk management strategies, implementation from corporate or national perspective.• Discussion of specific food and pathogen risk management challenges: E. coli 0157:H7 in ground beef Listeria in sliced deli meats Salmonella in cantaloupes and tomatoes Norovirus in salad bars
Thursday, 6/2; 8:00am - 12:00pm	<ul style="list-style-type: none">• Group activity: Evaluate risk management strategies for specific foods and consider how existing and proposed food safety legislation may impact ability to implement these strategies. Groups will work independently. However, faculty will meet with groups and discuss their project.
Friday, 6/3; 8:00am - 12:00pm	<ul style="list-style-type: none">• Group presentations, debate on the proposed Food Safety Act 2005• Review and debriefing• Final exam