PubH 7200 Section 103 Class #88052
Food Safety and Defense in the Context of Global Food Security
May Term 2017

Credits:	1 credit
Meeting Days/Time:	May 22, 23, 24 1:00pm – 5:00pm May 26 1:00pm – 4:00pm
Meeting Place:	Blegen Hall – Room 225
Instructor:	William Hueston, DVM, PhD Professor Emeritus College of Veterinary Medicine Fernando Sampedro, PhD Associate Professor, Center for Animal Health and Food Safety College of Veterinary Medicine, University of Minnesota
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I.   Course Description

Global Food Security exists when "all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life". Achieving global food security involves optimizing the objectives of access, affordability, safety, nutrition and choice. This course focuses on assuring food safety and preventing intentional contamination of the food supply (food defense) while making progress toward the broader goals of global food security.

Science provides invaluable information for evidence-based public health and food system resilience, yet good science alone is not enough to effectively address grand challenges such as global food security.

Government, industry and individual decisions affecting food systems are made daily in the face of significant gaps in our scientific knowledge. Further, different government agencies typically have responsibility for different aspects of food security. For example, the US Department of Agriculture (USDA) has the overall responsibility for assuring food access, affordability and nutrition while they share food safety responsibilities with the US Food and Drug Administration, and the Department of Homeland Security has primary responsibility for food defense. This course will stress systems thinking and a trans-disciplinary, systemic and holistic approach to food safety and defense policy, communication and action in the context of global food security.

This course will enhance participant's understanding of food security with special attention to the role food safety and food defense knowledge and skills in the context of global food security. At the conclusion of the course, participants will be able to work more effectively on food safety, food defense and food security where industry, government, academia and civil society all are involved.

Core competencies for public health professionals identified in the HRSA Council of Linkages June 2014 model that apply to this course include:

2. Policy Development/Program Planning Skills Tier 2:
> B6. Develops options for policies, programs and services (e.g. food safety and nutrition programs)

3. Communication Skills Tier 2:
> B8. Communicates the roles of governmental public health, health care, and other partners in improving the health of a community

5. Community Dimensions of Practice Skills Tier 2:
> B1. Distinguishes the roles and responsibilities of governmental and non-governmental organizations in providing programs and services to improve the health of the community
> B6. Facilitates collaborations among partners to improve health in a community (e.g. coalition building)

6. Public Health Science Skills Tier 2:
> B5. Retrieves evidence from print and electronic sources to support decision making
> B7. Uses evidence in developing, implementing, and improving policies, programs, and services

8. Leadership and Systems Thinking Skills Tier 2:
> B2. Describes public health as part of a larger inter-related system of organizations that influence the health of populations at local, national and global levels
> B.3. Explains the ways public health, health care, and other organizations can work together or individually to impact the health of a community

II. Course Prerequisites

None

III. Course Goals and Objectives

1. Deepen understanding of global food security as a "grand challenge" (also called social mess and wicked problem): complex, multi-factorial, systemic issues emerging at the convergence of animal health, human health, economic development and environmental change.

2. Differentiate between food safety and food defense and explain their relevance to global food security

3. Apply systems thinking and critical thinking tools in the context of food safety, defense and global food security issues

4. Develop key leadership skills for catalyzing collective action to optimize food safety and defense in the context of global food security

IV. Methods of Instruction and Work Expectations

Assigned Readings, Group Exercises
- This course combines lectures and demonstrations with individual and group work during class
- Participants are expected to complete a series of pre-readings that will be explored during the class
- Participants are expected to share a daily reflection that draws from the discussions during the day and the readings assigned for the next day.

1. Lectures with demonstrations
   - Participants are expected to spend 3-4 hours preparing before the first class session and 2-3 hours at the end of each day reflecting on key learnings and practicing skills introduced in class.
   - Participants are expected to take notes during class and be prepared to summarize major points of the lectures for the benefit of others in the class

2. Participation during class
   - Participants are expected to participate in class discussions and small group activities.
   - Each participant will be assigned to a small group tasked with exploring the food safety, food defense and food security issues surrounding a specific food or food ingredient. Each small group provided opportunities to make in-class presentations and summarize key points in a one page executive summary.
   - Students will be expected to interact with instructors during the class, asking questions and offering insights. The goal of this course is a greater understanding of food safety and defense in the context of global food security and development of skills critical to making further progress

3. Final assignments
   - Group assignment: Each small group will provide an in-class presentation and draft an executive summary of the food safety, food defense and food security issues surrounding a specific food or food ingredient
   - Individual assignments:
       i. Each participant will write a short paper (2-3 pages) detailing how the concepts and skills learned in the class can be applied to a specific aspect of food safety, food defense and food security. Participants may choose to use an issue with which they are involved as the focus of this paper.
       ii. Each participant will complete a personal learning contract to identify the new knowledge and skills and attitudes gained from the class that are immediately applicable, and to include a plan on how they will incorporate additional skills into their behaviors and performance

4. Evaluation
   - Each participant will complete an evaluation of the week-long experience at the conclusion of the final class.

V. Course Text and Readings

The required and optional readings are available through the UMN Library, which can be accessed through the course Moodle site.

Access Course Moodle Site
- go to www.umn.edu; Click on "One Stop" and then click on "myU"
- login with your University ID and password
- scroll to your course and click on the Moodle site link

Required Readings:

Please review the following videotape prior to class:
Nixon, S. (February 6, 2012). Solving Wicked Problems
http://www.youtube.com/watch?v=qUH5XOPF8pc

See course Moodle site for additional relative readings related to each day of the course

VI. Course Outline/Weekly Schedule/

	Daily Schedule	Assignments
Pre-Course		View "Solving wicked problems" video Pre course readings TBA as noted on Moodle site
Day 1	**Global Food Security** Current global situation as relates to food security Introduction to Global Food Security as a Grand Challenge (complex, adaptive problem) Introduction to the approaches needed to address grand challenges 1. Trans-disciplinary 2. Holistic 3. Systems thinking	Readings as noted on course Moodle site Share a daily reflection that draws from the discussions during the day and the readings assigned for that day.
Day 2	**Food Safety** Current global food safety situation Overview of the principles of food safety Interconnectedness of food safety and global food security	Readings as noted on course Moodle site Share a daily reflection that draws from the discussions during the day and the readings assigned for that day.
Day 3	**Food Defense** Current global food defense situation Overview of the principles of food defense Interconnectedness of food defense and global food security	Readings as noted on course moodle site Share a daily reflection that draws from the discussions during the day and the readings assigned for that day.
Day 4	**Synthesis and integration** The challenge of assuring food safety and food defense in the context of global food security Small group report out Overall course synthesis and integration	Readings as noted on course moodle site Share a daily reflection that draws from the discussions and assignments over the entire week.
Post-Course	Final Assignments	**Due Date: June 3** Small groups to write and submit to Moodle site a one page executive summary of their presentation Write a 2-3 page reflection paper detailing how the concepts and skills

| | | learned in the class can be applied to a specific aspect of food safety, food defense and food security. Participants may choose to use an issue with which they are involved as the focus of this paper. |
| | | Complete a personal learning contract to identify the new knowledge and skills and attitudes gained from the class that are immediately applicable, and to include a plan on how they will incorporate additional skills into their behaviors and performance |

VII. Evaluation and Grading

Grading will consider the following measures:

25 points, 25% of grade: Class preparation and participation including daily reflections
25 points, 25% of grade: Group project, oral presentation and executive summary
25 points, 25% of grade: Written reflection paper (2-3 pages)
25 points, 25% of grade: Learning contract

Failure to complete any of the assignments will result in an "F" or "N" (unsatisfactory) grade.

Due to the experiential nature of this course, participation in all 4 days of the course is required for a satisfactory grade. Therefore no options exist for making up missed days.

Late submission of either of the two final assignments will result in a reduction of 1 letter grade on the A-F scale. Extenuating circumstances, such as personal health issues, may be considered for late submission if prior approval is sought from the instructors.

This course is offered A/F or S/N

- **A/F letter grade will be determined by total effort as follows**
- **S Represents achievement that is satisfactory, which is equivalent to a C- or better.**

A 4.000	Represents achievement that is outstanding relative to the level necessary to meet course requirements. **94-100 points/percent**
A- 3.667	**90-93 points/percent**
B+ 3.333	**87-89 points/percent**
B 3.000	Represents achievement that is significantly above the level necessary to meet course requirements. **83-86 points/percent**
B- 2.667	**80-82 points/percent**
C+ 2.333	**77-79 points/percent**
C 2.000	Represents achievement that meets the course requirements in every respect. **73-76 points/percent**
C- 1.667	**70-72 points/percent**
D+ 1.333	**65-69 points/percent**
D 1.000	Represents achievement that is worthy of credit even though it fails to meet fully the

	course requirements. **60-64 points/percent**
F = below 60%	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.

For additional information, please refer to:
http://policy.umn.edu/Policies/Education/Education/GRADINGTRANSCRIPTS.html.

Course Evaluation

The SPH will collect student course evaluations electronically using a software system called CoursEval: www.sph.umn.edu/courseval. The system will send email notifications to students when they can access and complete their course evaluations. Students who complete their course evaluations promptly will be able to access their final grades just as soon as the faculty member renders the grade in SPHGrades: www.sph.umn.edu/grades. All students will have access to their final grades through OneStop two weeks after the last day of the semester regardless of whether they completed their course evaluation or not. Student feedback on course content and faculty teaching skills are an important means for improving our work. Please take the time to complete a course evaluation for each of the courses for which you are registered.

Incomplete Contracts

A grade of incomplete "I" shall be assigned at the discretion of the instructor when, due to extraordinary circumstances (e.g., documented illness or hospitalization, death in family, etc.), the student was prevented from completing the work of the course on time. The assignment of an "I" requires that a contract be initiated and completed by the student before the last official day of class, and signed by both the student and instructor. If an incomplete is deemed appropriate by the instructor, the student in consultation with the instructor, will specify the time and manner in which the student will complete course requirements. Extension for completion of the work will not exceed one year (or earlier if designated by the student's college). For more information and to initiate an incomplete contract, students should go to SPHGrades at: www.sph.umn.edu/grades.

University of Minnesota Uniform Grading and Transcript Policy - A link to the policy can be found at onestop.umn.edu.

VIII. Other Course Information and Policies

Grade Option Change (if applicable)

For full-semester courses, students may change their grade option, if applicable, through the second week of the semester. Grade option change deadlines for other terms (i.e. summer and half-semester courses) can be found at onestop.umn.edu. **The grading option for Public Health Institute courses may not be changed after the second day of class for 4-day courses. Grading options for 2 day courses may not be changed after the first day class**.

Course Withdrawal

Students should refer to the Refund and Drop/Add Deadlines for the particular term at onestop.umn.edu for information and deadlines for withdrawing from a course. As a courtesy, students should notify their instructor and, if applicable, advisor of their intent to withdraw.

Students wishing to withdraw from a course after the noted final deadline for a particular term must contact the School of Public Health Office of Admissions and Student Resources at sph-ssc@umn.edu for further information.

Student Conduct Code

The University seeks an environment that promotes academic achievement and integrity, that is protective of free inquiry, and that serves the educational mission of the University. Similarly, the University seeks a community that is free from violence, threats, and intimidation; that is respectful of the rights, opportunities,

and welfare of students, faculty, staff, and guests of the University; and that does not threaten the physical or mental health or safety of members of the University community.

As a student at the University you are expected adhere to Board of Regents Policy: *Student Conduct Code*. To review the Student Conduct Code, please see: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf.

Note that the conduct code specifically addresses disruptive classroom conduct, which means "engaging in behavior that substantially or repeatedly interrupts either the instructor's ability to teach or student learning. The classroom extends to any setting where a student is engaged in work toward academic credit or satisfaction of program-based requirements or related activities."

Use of Personal Electronic Devices in the Classroom

Using personal electronic devices in the classroom setting can hinder instruction and learning, not only for the student using the device but also for other students in the class. To this end, the University establishes the right of each faculty member to determine if and how personal electronic devices are allowed to be used in the classroom. For complete information, please reference: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

Scholastic Dishonesty

You are expected to do your own academic work and cite sources as necessary. Failing to do so is scholastic dishonesty. Scholastic dishonesty means plagiarizing; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; altering, forging, or misusing a University academic record; or fabricating or falsifying data, research procedures, or data analysis. (Student Conduct Code: http://regents.umn.edu/sites/default/files/policies/Student_Conduct_Code.pdf) If it is determined that a student has cheated, he or she may be given an "F" or an "N" for the course, and may face additional sanctions from the University. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/INSTRUCTORRESP.html.
The Office for Student Conduct and Academic Integrity has compiled a useful list of Frequently Asked Questions pertaining to scholastic dishonesty: http://www1.umn.edu/oscai/integrity/student/index.html. If you have additional questions, please clarify with your instructor for the course. Your instructor can respond to your specific questions regarding what would constitute scholastic dishonesty in the context of a particular class-e.g., whether collaboration on assignments is permitted, requirements and methods for citing sources, if electronic aids are permitted or prohibited during an exam.

Makeup Work for Legitimate Absences

Students will not be penalized for absence during the semester due to unavoidable or legitimate circumstances. Such circumstances include verified illness, participation in intercollegiate athletic events, subpoenas, jury duty, military service, bereavement, and religious observances. Such circumstances do not include voting in local, state, or national elections. For complete information, please see: http://policy.umn.edu/Policies/Education/Education/MAKEUPWORK.html.

Appropriate Student Use of Class Notes and Course Materials

Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. Such actions violate shared norms and standards of the academic community. For additional information, please see: http://policy.umn.edu/Policies/Education/Education/STUDENTRESP.html.

Sexual Harassment

"Sexual harassment" means unwelcome sexual advances, requests for sexual favors, and/or other verbal or physical conduct of a sexual nature. Such conduct has the purpose or effect of unreasonably interfering with

an individual's work or academic performance or creating an intimidating, hostile, or offensive working or academic environment in any University activity or program. Such behavior is not acceptable in the University setting. For additional information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/SexHarassment.pdf

Equity, Diversity, Equal Opportunity, and Affirmative Action

The University will provide equal access to and opportunity in its programs and facilities, without regard to race, color, creed, religion, national origin, gender, age, marital status, disability, public assistance status, veteran status, sexual orientation, gender identity, or gender expression. For more information, please consult Board of Regents Policy: http://regents.umn.edu/sites/default/files/policies/Equity_Diversity_EO_AA.pdf.

Disability Accommodations

The University of Minnesota is committed to providing equitable access to learning opportunities for all students. Disability Services (DS) is the campus office that collaborates with students who have disabilities to provide and/or arrange reasonable accommodations.

If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact DS at 612-626-1333 to arrange a confidential discussion regarding equitable access and reasonable accommodations.

If you are registered with DS and have a current letter requesting reasonable accommodations, please contact your instructor as early in the semester as possible to discuss how the accommodations will be applied in the course.

For more information, please see the DS website, https://diversity.umn.edu/disability/.

Mental Health and Stress Management

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance and may reduce your ability to participate in daily activities. University of Minnesota services are available to assist you. You can learn more about the broad range of confidential mental health services available on campus via the Student Mental Health Website: http://www.mentalhealth.umn.edu.

The Office of Student Affairs at the University of Minnesota

The Office for Student Affairs provides services, programs, and facilities that advance student success, inspire students to make life-long positive contributions to society, promote an inclusive environment, and enrich the University of Minnesota community.

Units within the Office for Student Affairs include, the Aurora Center for Advocacy & Education, Boynton Health Service, Central Career Initiatives (CCE, CDes, CFANS), Leadership Education and Development – Undergraduate Programs (LEAD-UP), the Office for Fraternity and Sorority Life, the Office for Student Conduct and Academic Integrity, the Office for Student Engagement, the Parent Program, Recreational Sports, Student and Community Relations, the Student Conflict Resolution Center, the Student Parent HELP Center, Student Unions & Activities, University Counseling & Consulting Services, and University Student Legal Service.

For more information, please see the Office of Student Affairs at http://www.osa.umn.edu/index.html.

Academic Freedom and Responsibility: for courses that do not involve students in research

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.*

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

OR:

Academic Freedom and Responsibility, for courses that involve students in research

Academic freedom is a cornerstone of the University. Within the scope and content of the course as defined by the instructor, it includes the freedom to discuss relevant matters in the classroom and conduct relevant research. Along with this freedom comes responsibility. Students are encouraged to develop the capacity for critical judgment and to engage in a sustained and independent search for truth. Students are free to take reasoned exception to the views offered in any course of study and to reserve judgment about matters of opinion, but they are responsible for learning the content of any course of study for which they are enrolled.* When conducting research, pertinent institutional approvals must be obtained and the research must be consistent with University policies.

Reports of concerns about academic freedom are taken seriously, and there are individuals and offices available for help. Contact the instructor, the Department Chair, your adviser, the associate dean of the college, or the Vice Provost for Faculty and Academic Affairs in the Office of the Provost.

* Language adapted from the American Association of University Professors "Joint Statement on Rights and Freedoms of Students".

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