

**FOS 5205 Current Issues in Food Safety  
3 Credits**

**Course Instructors and Office Hours**

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**Teaching Assistant**

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Dr. Schneider (KRS) will be responsible for overall coordination and administration of the course. He will share instructional duties with Dr. Renée Goodrich Schneider (RGS). Please consult the course outline for specific lecture dates and topics. The teaching assistant, Mr. Gutierrez, will be available for general questions concerning course matters.

**Course Hours/Location**

Course will be held in McCarty A 2196 Tuesday 5-6<sup>th</sup> period and McCarty A 2196 Thursday 5<sup>th</sup> period.

## **Course Objectives**

Upon completion of this course, students should:

1. Be familiar with food safety hazards, assessment of risk, and evaluation.
2. Understand the principles, actions, and limitations of food sanitation procedures.
3. Be familiar with current and future implications concerning food safety hazards and risks.
4. Be able to research a topic, synthesis current information and develop a presentation.

## **Prerequisites**

MCB 2000, MCB 2000L, or the equivalent.

## **Course Format**

Students will acquire knowledge of the pertinent issues in food safety and sanitation through the use of lectures, class discussions, outside reading and assignments. Students registered for FOS 5205 will be required to submit a 10-15 page term paper in the area of Food Safety and Sanitation. Topics must be approved by instructors. Each student will be required to give a 30-minute class lecture during the course of the semester. Each student will also be required to participate other activities such as group discussion and presentations.

## **Course Description**

Lectures, discussions, and demonstrations concerning microbial, chemical and biological safety of food, principles of sanitation for the food processing and retail foods industries.

## **Textbook and References**

### **Required**

Principles of Food Sanitation, 5th Ed., Marriott and Gravani, Springer, New York, NY.  
Found at: <http://www.amazon.com> or the UF Campus Bookstore

This text will be on reserve at the Marston Science Library under FOS 4202 / FOS 5205 and be available for purchase from the UF bookstores and from several online sources.

### **Additional References will be provided for week's topic as needed (example)**

Scallan E, Hoekstra RM, Angulo FJ, Tauxe RV, Widdowson M-A, Roy SL, et al. 2011. Foodborne illness acquired in the United States—Major pathogens. *Emerg Infect Dis.* 17(1):7-15.

## **Grading**

- Exams (3) 60% (20% each)

Exams 1 and 2 (~50 min, closed book exams) will each cover approximately 1/3 of the course material and be equally weighted. However, later course material will draw on foundation material presented in the first section of the course; students should therefore be prepared to apply principles from the entire course as they develop their answers to assignments and exams. The final exam will be a comprehensive, closed book exam that will allow the student to demonstrate an understanding and synthesis of the concepts of food safety and sanitation from the entire course.

- Term Paper/Class Assignments 40%

The term paper and class assignments represent a significant part of the course grade, and their successful completion is critical. The term paper, in the form of a scientific review paper on a particular topic relevant to food safety and sanitation. All topics must be cleared through the instructor(s). Additionally, you will be asked to present your topic as a brief lecture to your fellow students. Please adhere to stated deadlines for maximum credit.

Attendance and promptness will be noted.

<b>FOS 5205</b>	
	Percent (%)
Class Assignments	10
Grad Exams	15
Term Paper	15
Exam 1	20
Exam 2	20
Final Exam	20

Course Average Grade
90 – 100 A
88 – 89 B+
84 – 87 B
80 – 83 B-
78 – 79 C+
74 – 77 C
70 – 73 C-
68 – 69 D+
64 – 67 D
60 – 63 D-
< 60 E

## Course Outline

### **Week 1**

8/25 Class Introduction and Overview for FOS 4202 and FOS 5205

**8/25 Additional Overview for FOS 5205**

8/27 Food Safety

Read Chapter 1 (Marriott and Gravani)

### **Week 2**

9/1 Foodborne Pathogen

**9/1 Recent Foodborne Outbreaks**

9/3 Foodborne Pathogens

Read Chapter 3 (Marriott and Gravani)

### **Week 3**

9/8 Foodborne Pathogens (TBA)

**9/8 Current Issues: Journal Review (What's happening this semester?)**

9/10 Foodborne Pathogens

Read Chapters 3 (Marriott and Gravani)

### **Week 4**

9/15 Allergens

**9/15 Controversies: Organic vs. Conventional Farming/GMOs/Etc.**

9/17 Non-microbial Hazards (Chemical and Physical) (Dr. S. Ahn)

Read Chapters 4 and 5 (Marriott and Gravani)

### **Week 5**

**9/22 Exam 1**

**9/22 Grad Exam 1 (In class)**

9/24 Regulations (Guest Lecture Dr. Goodrich Schneider)

Readings will be provided

### **Week 6**

9/29 Food Safety Systems Overview, Part 1

**9/29 Implications of New Food Regulations**

10/1 Food Safety Systems Overview, Part 2

Readings will be provided

Read Chapters 7 (Marriott and Gravani)

**Week 7**

10/6 Food Safety Systems Overview, Part 3

**10/6 Experimental Design and Statistics**

10/8 Personal Hygiene

Read Chapter 7 (Marriott and Gravani)

**Week 8**

10/13 Cleaning and Sanitizing Part 1

**10/13 Presentation Skills**

10/15 Cleaning and Sanitizing Part 2 (Dr. Sreedharan)

Read Chapters 6, 9 and 10 (Marriott and Gravani)

**Week 9**

10/20 Cleaning and Sanitizing Part 3

**10/20 Risk Assessment (Guest lecturer Dr. Danyluk)**

**10/22 Exam 2 (Take home grad exam)**

Read Chapter 10 and 11 (Marriott and Gravani)

**Week 10**

10/27 Pest Control

**10/27 Student Presentations**

10/29 Waste Management

Read Chapter 12 (Marriott and Gravani)

**Week 11**

11/3 Sanitary Design, Part 1

**11/3 Student Presentations**

11/5 Sanitary Design, Part 2

Read Chapter 13 and 14 (Marriott and Gravani)

**Week 12**

11/10 Sanitary Design, Part 3

**11/10 Student Presentations**

11/12 Plant Specific Case Studies

Read Chapter 14 (Marriott and Gravani)

**Week 13**

11/17 Plant Specific Case Studies Seafood (Dr. G. Baker)

**11/17 Environmental Monitoring: Do's and Don'ts (Dr. G. Baker)**

11/19 Plant Specific Case Studies

Read Chapters 15, 17, 18, 19 (Marriott and Gravani)

**Week 14**

11/24 Recall and Traceback (Guest Lecturer Goodrich-Schneider)

**11/24 Student Presentations**

11/26 No Class – Thanksgiving Break

**Week 15**

12/1 Biosecurity

**12/1 Student Presentations**

12/3 ServSafe and the Food Code

Read Chapter 2 (Marriott and Gravani)

**Week 16**

12/8 Course Review (Last Day of Class)

**12/8 Review of Student Topics**

12/14 ServSafe Class and Certification Exam (Optional) (Time subject to change)

**Week 17**

**12/16 Final Exam 5:30-7:30 pm**

**Important Notes:****Academic Honesty.**

As a result of completing the registration form at the University of Florida, every student has signed the following statement: I understand that the University of Florida expects its students to be honest in all academic work. I agree to adhere to this commitment to academic honesty and understand that my failure to comply with this commitment may result in disciplinary action up to and including expulsion from the University.

**University of Florida Counseling Services.**

On-campus resources are available for students having personal problems or lacking clear career and academic goals that interfere with their academic performance. These resources include:

1. University Counseling Center. 301 Peabody Hall, <http://www.counsel.ufl.edu/>
2. Student Mental Health. Student Health Care Center, 392-1171, personal counseling;

3. University of Florida Policy on Sexual Assault.  
[http://www.counsel.ufl.edu/selfHelpInformation/sexualAssaultAndHarassment/university\\_of\\_florida\\_policy\\_on\\_sexual\\_assault.aspx](http://www.counsel.ufl.edu/selfHelpInformation/sexualAssaultAndHarassment/university_of_florida_policy_on_sexual_assault.aspx)
4. Career Resource Center. Reitz Union, <http://www.crc.ufl.edu/>, career development assistance and counseling.

#### Period Schedule

<b>Period</b>	<b>Time</b>
1	7:25 - 8:15am
2	8:30 - 9:20am
3	9:35 - 10:25am
4	10:40 - 11:30am
5	11:45 - 12:35pm
6	12:50 - 1:40pm
7	1:55 - 2:45pm
8	3:00 - 3:50pm
9	4:05 - 4:55pm
10	5:10 - 6:00pm
11	6:15 - 7:05pm