

**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. Goodrich Schneider (RGS), and with Ms. Marianne Fatica (MF). Please consult the course outline for specific lecture dates and topics.

**Course Hours/Location**

Course will be held in MCC-B 2102 on Tuesdays and Thursdays 5<sup>th</sup> period and Thursday 6<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.

## **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 15-20 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**

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 and FOS 5205 and be available for purchase from the UF bookstores and from several online sources.

There will be a supplemental text for the course, "Foodborne Pathogens: Risks and Consequences Task Force Report" which is not longer for sale. The text may be found on through a link on the CAST website. The instructions of how to obtain it are below: First, go the Cast website at <http://www.cast-science.org/publications.asp?bitShowAll=1> Once at the website, search for Foodborne Pathogens: Risks and Consequences Task Force Report or just scroll down the list until you find it. Once you find it, click on the download link (if you click the hardcopy you'll have to pay for shipping and handling even though it says its free) and add to cart. The next screen will ask you to log in. Use the second set of fill-in boxes to sign up as a new user. Once you've completed the form, you'll be able to download the manual for free.

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.

Additional references will be provided as needed.

## **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 (%)	Course Average Grade
Class Assignments	10	90 - 100 A
Class Presentation	10	88 - 89 B+
Term Paper	20	80 - 87 B
Exam 1	20	78 - 79 C+
Exam 2	20	70 - 77 C
Final Exam	20	68 - 69 D+
		60 - 67 D
		< 60 E

## **Course Outline**

### **Week 1**

8/23 Class Introduction and Overview for FOS 4202 and FOS 5205

8/25 Food Safety Concerns

8/25 Additional Overview for FOS 5205

Read Chapter 1 (Marriott and Gravani)

**Week 2**

- 8/30 Foodborne Pathogens Part 1
- 9/1 Foodborne Pathogens Part 2
- 9/1 Experimental Design

Read Chapter 3 (Marriott and Gravani)  
Read Chapter 2 (CAST Report)

**Week 3**

- 9/6 Allergens (Guest lecturer Marianne Fatica)
- 9/8 Chemical Hazards
- 9/8 Risk Assessment (Guest lecturer Dr. Michelle Danyluk)

Read Chapter 4 (Marriott and Gravani)

**Week 4**

- 9/13 Exposure Assessment and Dose Response
- 9/15 Economic Impact (Guest lecturer Marianne Fatica)
- 9/15 Sweeteners (Guest lecturer Marianne Fatica)

Read Chapters 3, 4, 5, and 6 (CAST Report)

**Week 5**

- 9/20 Epidemiology
- 9/22 Epidemiology (cont)
- 9/22 Recent Foodborne Outbreaks (Schneider and Fatica)

Read Chapter 7 (CAST Report)  
Read (Handouts to be mailed)

**Week 6**

- 9/27 Exam 1 (Take Home for Grad Portion)**
- 9/29 Regulations (Guest Lecture Dr. Goodrich Schneider)
- 9/29 Implications of New Food Regulations

Read Chapter 7 (Marriott and Gravani)

**Week 7**

- 10/4 HACCP Overview
- 10/6 SSOPs, HACCP and Plan Creation
- 10/6

**Week 8**

- 10/11 GAPS and other Food Safety Programs
- 10/13 Quality Assurance
- 10/13 Presentation Skills

Read Chapter 8 (Marriott and Gravani)

**Week 9**

10/18 Personal Hygiene  
10/20 Cleaning and Sanitizing Part 1  
10/20 Student Presentations

Read Chapter 6 and 9 (Marriott and Gravani)

**Week 10**

10/25 Cleaning and Sanitizing Part 2  
**10/27 Exam 2**

Read Chapter 10 and 12 (Marriott and Gravani)

**Week 11**

11/1 Waste Management  
11/3 Pest Control  
11/3 Student Presentations

Read Chapter 13 and 14 (Marriott and Gravani)

**Week 12**

11/8 Sanitary Design Part 1  
11/10 Sanitary Design Part 2  
11/10 Student Presentations

**Week 13**

11/15 Plant Specific Case Studies  
11/17 Plant Specific Case Studies  
11/17 Student Presentations

**Week 14**

11/22 ServSafe and the Food Code  
11/24 No Class (Thanksgiving)

**Week 15**

11/29 Recall and Traceback (Guest Lecturer Goodrich-Schneider)  
12/1 Biosecurity  
12/1 Class Review

Read Chapter 2 (Marriott and Gravani)

**Week 16**

12/6 Course Review (Last Day of Class)  
12/8 Study Day

## Week 17

12/13 ServSafe Class and Certification Exam (Optional)

### 12/16 Final Exam (MCC-B 2102)

7:30-9:30 am

## 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

Period	Time
1	7:25 - 8:15am
2	8:30 - 9:20am
3	9:35 - 10:25am
4	10:40 - 11:30am
5	11:45am - 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
E1	7:20 - 8:10pm
E2	8:20 - 9:10pm
E3	9:20 - 10:10pm