

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

**Course Instructors and Office Hours**

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**Post Doctoral Assistant**

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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. Jay De (JD) and Mr. Adam Baker (AB). Please consult the course outline for specific lecture dates and topics. The teaching assistant, AB, will be available for general questions concerning course matters.

**Course Hours/Location**

The course will be held in McCarty A 2196 Tuesday and Thursday 5<sup>th</sup> period and WEIM 2056 Tuesday 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.
4. Be able to research a topic, synthesis current information and develop a term paper and class 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-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, 6th Ed., Marriott, Schilling 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 (3)	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

## Tentative Course Outline

### **Week 1**

8/20 Class Introduction and Overview for FOS 4202 and FOS 5205

8/22 Food Safety

Read Chapter 1 (Marriott, Schilling and Gravani)

### **Week 2**

8/27 Foodborne Pathogens

**8/27 Recent Foodborne Outbreaks**

8/29 Foodborne Pathogens

Read Chapter 3 (Marriott, Schilling and Gravani)

### **Week 3**

9/3 Foodborne Pathogens

**9/3 Current Issues: Journal Review (What's happening this semester?)**

9/5 Allergens (Dr. De and Adam Baker)

Read Chapters 3 (Marriott, Schilling and Gravani)

### **Week 4**

9/10 Non-microbial Hazards-Chemical and Physical

**9/10 Controversies: Organic vs. Conventional Farming/GMOs/Etc.**

9/12 Personal Hygiene (Dr. De and Adam Baker)

Read Chapters 4 and 5 (Marriott, Schilling and Gravani)

### **Week 5**

9/17 Spoilage Organisms

**9/17 Implications of New Food Regulations**

**9/19 EXAM 1**

Readings will be provided

### **Week 6**

9/24 Regulations

**9/24 Brief Look at HACCP and FSMA**

9/26 Food Safety Systems Overview, Part 1

Readings will be provided

Read Chapters 7 and 8 (Marriott, Schilling and Gravani)

### **Week 7**

10/1 Food Safety Systems Overview, Part 2

**10/1 Presentation Skills**

10/3 Food Safety Systems Overview, Part 2

Read Chapters 6 and 7 (Marriott, Schilling and Gravani)

**Week 8**

10/8 Cleaning and Sanitizing Part 1

**10/8 Advanced Chlorine Chemistry**

10/10 Cleaning and Sanitizing Part 2

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

**Week 9**

10/15 Cleaning and Sanitizing Part 3

**10/15 Risk Assessment**

**10/17 Exam 2 (Take home grad exam)**

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

**Week 10**

10/22 Pest Control

**10/22 Environmental Monitoring (Guest lecturer Dr. Danyluk)**

10/24 Waste Management

Read Chapters 12 and 13 (Marriott, Schilling and Gravani)

**Week 11**

10/29 Sanitary Design, Part 1

**10/29 Student Presentations**

11/31 Sanitary Design, Part 2

Read Chapter 13 and 14 (Marriott, Schilling and Gravani)

**Week 12**

11/5 Sanitary Design, Part 3

**11/5 Student Presentations**

11/7 Plant Specific Case Studies

Read Chapter 14 (Marriott, Schilling and Gravani)

**Week 13**

11/12 Waste Treatment Field Trip

**11/12 Waste Treatment Field Trip**

11/13 Plant Specific Case Studies

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

**Week 14**

11/19 Recall and Traceback (Guest Lecturer Goodrich-Schneider)

**11/19 Hot Topic (TBA)**

11/21 Biosecurity

**Week 15**

11/26 ServSafe and the Food Code

**11/26 ServSafe Extra**

11/28 No Class – Thanksgiving Break

Read Chapter 2 (Marriott, Schilling and Gravani)

**Week 16**

12/3 Course Review (Last Day of Class)

**12/3 Review of Student Topics**

**Week 17**

**12/12 Final Exam 3:00-5:00 pm (Exam will be one hour, grad exam will follow general exam and will be given in class)**

**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.

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

#### 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