# FOS 4202 Food Safety and Sanitation 2 Credits

## **Course Instructors and Office Hours**

Keith R. Schneider, Professor Food Science and Human Nutrition Department Room 216, AFPL Building, Newell Drive Phone: 352.294.3910 Email: keiths29@ufl.edu Office Hours: Tuesdays and Thursdays, 9-11am or by appointment

## Post Doctoral Assistant

Jaysankar De, Post-Doctoral Research Associate Food Science and Human Nutrition Department Room 105, AFPL Building, Newell Drive Phone: 352.294.3903 Email: jde@ufl.edu Office Hours: Tuesdays and Thursdays, 9-11am or by appointment

## **Teaching Assistant**

Adam Baker Food Science and Human Nutrition Department 210 Aquatic Food Products Laboratory Tel: 352.294.3906 Email: bake275@ufl.edu

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

## **Course Hours/Location**

Course will be held in McCarty A 2196 Tuesday and 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.

## **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 4202 will be required to submit a 5-6 page term paper in the area of Food Safety and Sanitation. Topics must be approved by instructors.

# 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 (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.

Additional references will be provided as needed.

# <u>Grading</u>

•	Exams (2)
	Final Exam

50% (25% each) 30% 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.

Class Assignments 20%

The class assignments represent a significant part of the course grade, and their successful completion is critical. A term paper for extra credit must be 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). Please adhere to stated deadlines for maximum credit.

Attend	ance	and	prompt	tness	will	be not	ed	•

FOS 4202	
	Percent (%)
Class Assignments	20
Exam 1	25
Exam 2	25
Final Exam	30

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 52058/22 Food Safety

Read Chapter 1 (Marriott, Schilling and Gravani)

## Week 2

8/27 Foodborne Pathogens

8/29 Foodborne Pathogens

Read Chapter 3 (Marriott, Schilling and Gravani)

## Week 3

- 9/3 Foodborne Pathogens
- 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
- 9/12 Personal Hygiene Dr. De and Adam Baker)

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

## Week 5

9/17 Spoilage Organisms 9/19 EXAM 1

Readings will be provided

## Week 6

9/24 Regulations9/26 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

10/3 Food Safety Systems Overview, Part 2

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

## Week 8

10/8 Cleaning and Sanitizing Part 1

10/10 Cleaning and Sanitizing Part 2

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

#### Week 9

10/15 Cleaning and Sanitizing Part 3 10/17 Exam 2 (Take home grad exam)

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

#### Week 10

10/22 Pest Control 10/24 Waste Management

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

#### Week 11

10/29 Sanitary Design, Part 1 11/31 Sanitary Design, Part 2

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

#### Week 12

11/5 Sanitary Design, Part 3

11/7 Plant Specific Case Studies

Read Chapter 14 (Marriott, Schilling and Gravani)

## Week 13

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) 11/21 Biosecurity

#### Week 15

11/26 ServSafe and the Food Code 11/28 No Class – Thanksgiving Break

Read Chapter 2 (Marriott, Schilling and Gravani)

#### Week 16

12/3 Course Review (Last Day of Class)

#### Week 17

12/12 Final Exam 3:00-4:00 pm (Exam will be one hour)

## 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. <u>http://www.counsel.ufl.edu/selfHelpInformation/sexualAssaultAndHarassment/university of florida policy on sexual assault.aspx</u>
- 4. Career Resource Center. Reitz Union, <u>http://www.crc.ufl.edu/</u>, 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 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 911.

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 11:45 - 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		
612:50 - 1:40pm71:55 - 2:45pm83:00 - 3:50pm94:05 - 4:55pm105:10 - 6:00pm	4	10:40 - 11:30am
71:55 - 2:45pm83:00 - 3:50pm94:05 - 4:55pm105:10 - 6:00pm	5	11:45 - 12:35pm
8 3:00 - 3:50pm 9 4:05 - 4:55pm 10 5:10 - 6:00pm	6	12:50 - 1:40pm
9 4:05 - 4:55pm 10 5:10 - 6:00pm	7	1:55 - 2:45pm
10 5:10 - 6:00pm	8	3:00 - 3:50pm
•	9	4:05 - 4:55pm
11 6:15 - 7:05pm	10	5:10 - 6:00pm
	11	6:15 - 7:05pm