

Food Safety and Sanitation **11:709:301 (2 credits)**

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Day, Time, & Location: Thompson Hall 206, Thursday 10:20 AM-12:20 PM

Pre-requisites: 11:709:201, 11:709:202

Course Description:

Fundamentals of food safety and sanitation, microbiological and environmental food pathogens, foodborne disease prevention in commercial and non-commercial food operations, and food safety guidelines, regulations, and management systems. Hazard analysis of food preparation and processing activities, determination of critical control points, and monitoring procedures and corrective actions to ensure food safety.

Course website: Rutgers Canvas course site

Textbooks and Readings (not required to purchase):

- ServSafe Manager, National Restaurant Association, 8th Ed
- Foodservice Organizations, M.B. Gregoire, 9th Ed (Chapter 8)
- Foodservice Management: Principles and Practices, J. Payne-Palacio & M. Theis, 13th Ed (Chapters 3 and 4)
- *Additional Readings will be posted on Canvas*

Office Hours:

By arrangement

NOTE: The best way to reach me is by email. In case you do not receive a response from me within 24hrs (M-F 9-5), please contact me again.

Student Learning Outcomes:

At the conclusion of this course, students will be able to:

1. Know basic food microbiology and be able to assess risk factors of food borne diseases in food preparation, preservation, processing, and service.
2. Evaluate the impact of foodborne illness and food allergens.
3. Understand principles of food service safety and accident prevention in the quantity kitchen environment.
4. Understand standards for sanitary kitchen equipment and facilities.
5. Take and pass the National Restaurant Association's ServSafe Manager Exam.
6. Be able to apply the principles of Hazard Analysis Critical Control Points (HACCP) and identify appropriate corrective actions.

ASSIGNMENTS:

1. Prepare a comprehensive Table with an overview of Food Pathogens (Food Sources, Symptoms, Onset time, Prevention, other)
2. Orally present a 10 minute presentation on one Pathogen or Allergen assigned to you.
3. HACCP Case Study: Managing Food Safety/Hazard Analysis Critical Control Points (HACCP) in Foodservice Facilities
4. Assignments on researching current topics on Food Safety and Sanitation

EXAMS:

- Practice Quizzes
- Practice Exams on ServSafe Manager material
- ServSafe Manager Exam (Final Exam)

2022 Core Knowledge for the RDN (KRDN) – Standards for the Didactic Programs in Dietetics: Rutgers University Department of Nutritional Sciences undergraduate Didactic Program in Dietetics is accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND). The following ACEND Core Knowledge aptitudes are included within the curriculum of this course:

KRDN 1.3: Apply critical thinking skills (i.e., food pathogen assignment, current food safety concerns and trends).

KRDN 4.1: Apply management theories to the development of programs or services (i.e., simulations/case studies).

KRDN 4.4: Apply the principles of human resource management to different situations (i.e., case studies/simulations).

KRDN 4.5: Apply safety and sanitation principles related to food, personnel and consumers (i.e., quizzes, ServSafe Manager Certification Exam).

KRDN 4.6: Explain the processes involved in delivering quality food and nutrition services (i.e., ServSafe training, HACCP training).

Classroom Conduct:

As a potential future health care employee, we expect college-level, professional behavior. Once lab/class has started, such things as reading newspapers, working on outside-of-class materials, carrying on distracting side conversations, leaving early, etc., are considered rude and distracting to us, your classmates, and especially to our guests when present. All cell phones must be turned to vibrate or silent during class time. If a student feels it necessary to answer a phone or open a text during class time, that student must exit the classroom to do so. Laptops must be used for class-related activities ONLY, not social networking or shopping. Students attending class are expected to arrive to class on time and stay the entire class time. Special situations should be discussed with the instructor. It is disruptive to guest lecturers, students, and to class to arrive late or leave before class is dismissed. Adjust travel times, appointments, and work schedules accordingly. Class will be dismissed in a timely manner so that students may commute to the next class.

All assignments are due on the due date noted on Canvas. Unless prior arrangements are made,

any assignment received after the due date will be considered late and 5 % will be deducted for each day of delay.

If you are unable to attend class due to medical or personal emergencies the day an assignment is due, the assignment can be uploaded on Canvas and a printed copy (if required) can be submitted at a later time. Doctor's note is required to excuse any medical absences.

Participation:

We believe one of the best ways to learn is from conversation and debates with your peers. We hold an open classroom with opportunities for discussion. Please participate when you deem it is appropriate and please be courteous to your fellow peers. Preparing your assignments ahead of time makes you a better participant and makes the discussions more constructive.

Academic Integrity

As a student of Rutgers University you are responsible for understanding and abiding by the university's principles of academic integrity. For more information about the academic integrity policy, visit: <http://academicintegrity.rutgers.edu/integrity.shtml>. These policies are strictly enforced!

Grading:

<u>Course Requirement</u>	<u>Points</u>
Attendance/Participation	100
Participation/Homework	~150
Practice Quizzes	~150
Current Topics Assignment	80
Pathogen Presentation	80
Pathogen Table	80
HACCP Assignments	100
ServSafe Practice Test	100
Final Exam-ServSafe Manager	200
	Total points ~1,000

92 - 100% = A

86 – 91.99% = B+

80 – 85.99% = B

75 – 79.99% = C+

70 – 74.99% = C

60 – 69.99% = D

Below 60% = F

Attendance and Participation will affect your performance and your grade in this course. Attendance will be taken at all classes. Participation will include submitting evaluation forms for student presentations, occasional smaller assignments (such as “recent foodborne outbreaks”, case studies) and active participation in class discussions.

- **There will be no negotiating on the final grades.**

Viewing Grades: It is your responsibility to know your exam and assignment scores which will be posted on Canvas. Grades will also be in an excel spreadsheet on the professor’s work (password protected) computer.

TENTATIVE SYLLABUS:

WEEK	LECTURES	READINGS
JAN 19	Course Overview & Introduction to Food Safety ServSafe Diagnostic Test	
26	Hazards to Food Safety & Forms of Contamination Outbreaks & Recalls	SS-PPT 1, 2
FEB 2	<i>Guest Lecture:</i> Dr. Donald Schaffner, Dept. Food Science	SS-PPT 3
9	Employee Health and Personal Hygiene & The Flow of Food <i>Bacillus Cereus & Listeria</i>	SS-PPT 4, 5
16	The Flow of Food: Purchasing, Receiving, Storage <i>STEC & Campylobacter Jejuni</i>	SS-PPT 6, 7

23	Preparation & Service <i>Clostridium Perfringens & Botulinum</i>	SS-PPT 8, 9
MAR 2	<i>Guest Lecture:</i> John Nason, University Sanitarian	
9	Food Safety Management Systems & HACCP <i>Salmonella Typhi & Non-Typhoidal</i>	SS-PPT 10 & Canvas Readings
23	ServSafe Quiz on PPT 1-9 Facilities Maintenance <i>Shigella & Staphylococcus, Vibrio</i>	SS-PPT 11 HACCP Readings
30	Cleaning/Sanitizing HACCP (+ Quiz on readings, videos) Current Topics: FSMA / Mislabeling <i>Viruses: Hepatitis A & Norovirus</i>	SS-PPT 12 HACCP Assignment
APR 6	Pest Management HACCP Current Topics: Leafy Greens / Raw Dairy <i>Parasites</i>	SS- PPT 13 HACCP Assignment
13	Food Safety Regulation & Standards HACCP Current Topics: Allergies / COVID <i>Parasites, Toxins</i>	SS- PPT 14 HACCP Assignment
20	Staff Food Safety and Training HACCP Current Topics: Pesticides / Microplastics <i>Toxins</i>	SS-PPT 15

	ServSafe Review	
27	ServSafe Practice Test	
MAY 8 8:30-11 AM	FINAL EXAM (ServSafe Exam)	

PLAN FOR ASSESSMENT OF COURSE LEARNING GOALS & EVALUATION CRITERIA

Student Learning Goals for Food Safety and Sanitation:

Learning Goals 1 &2:

1. Know basic food microbiology and be able to assess risk factors of food borne diseases in food preparation, preservation, processing, and service.
2. Evaluate the impact of foodborne illness and food allergens.

Assignment/Prompt Used to Assess Student Achievement

Learning Goals 1 & 2 will be addressed in completion of a comprehensive table for the most common Food Pathogens, by each student, including their food sources, onset time and duration, symptoms and methods of prevention in the Food Service setting. In addition students will prepare a short PowerPoint presentation on one Food pathogen or Allergen that is assigned to them, and present it to the class. In addition, this material will be tested on Quizzes and Exams, as well as on the ServSafe Manager Exam. The pathogen table and Powerpoint assignments will be assigned to the students at the start to mid-semester, and the ServSafe Exam will be taken at the end of the semester as their Final Exam.

Learning Goals 3, 4 &5:

3. Understand principles of food service safety and accident prevention in the quantity kitchen environment.
4. Understand standards for sanitary kitchen equipment and facilities.
5. Take and pass the National Restaurant Association's ServSafe Manager Exam.

Assignment/Prompt Used to Assess Student Achievement

Learning goals 3, 4 and 5 will initially be addressed with assignments that will help the students prepare to take the ServSafe Exam at the end of the semester. They will consist of practice quizzes, which will take place throughout the semester, as well as a comprehensive Practice Test toward the end of the semester. The ServSafe Exam will be the students' final exam during the week of finals.

Learning Goal 6:

6. Be able to apply the principles of Hazard Analysis Critical Control Points (HACCP) and

identify appropriate corrective actions.

Assignment/Prompt Used to Assess Student Achievement

Students will work on a Case Study on managing Food Safety/Hazard Analysis Critical Control Points (HACCP) in Foodservice Facilities. In addition, as part of their grade, each student will review their peers' case study and provide feedback according to the assigned rubric.

Evaluation Criteria

All students in the class will be assessed for achieving these learning goals. The Instructor and Teaching Assistant will be grading Exams and Assignments. Students with a grade of at least 70% (C grade according to the class rubric) will be considered to have achieved the student learning goals.

The ServSafe examination is provided by the National Restaurant Association and, in order to pass the ServSafe Exam and receive the ServSafe Manager Certificate, a grade of 70% needs to be achieved. Note: it is not essential for students to obtain this Certificate in order to receive a passing grade for this course.

PLANS TO USE ASSESSMENT RESULTS

At the end of each semester the instructor of the course will review student accomplishment of these learning goals, to determine areas needing modification in order to improve student learning. Furthermore, monitoring and recording of our students' passing rate of the ServSafe Manager Exam is integral to our accredited Dietetics Program, and the student scores are shared with ACEND each semester.

DIVERSITY, EQUITY AND INCLUSION

It is our intention that students of all backgrounds will be well served by this course. We will work to create an environment of inclusion which respects and affirms the inherent dignity, value, and uniqueness of all individuals, communities and perspectives. We are fortunate to have a diverse university. Diverse voices and life experiences enhance the learning process and welcome students to share their personal experiences. We will not tolerate disrespectful language or behavior against any individual or group. If you feel as though you have been disrespected or treated unfairly by the instructors or any other individual please let us know. You may speak with the instructor in person, over email or report anonymously via the Office of Academic Programs. In addition, you may also report bias to the Rutgers Diversity and Inclusion initiative using this link: <http://inclusion.rutgers.edu/report-bias-incident/>

ACADEMIC INTEGRITY POLICY

Each student is responsible for understanding the RU Academic Integrity Policy. This policy will be strongly enforced. For all examinations and assignments, the students will be required to uphold the RU Honor Pledge, which states, "On my honor, I have neither received nor given any unauthorized assistance on this assignment". All written assignments may be screened by an automated plagiarism detection service that compares student work against a large data base of past work (including not only published work but also previous student submissions). The RU Academic Integrity Policy and code of student conduct are available at:

<http://nbacademicintegrity.rutgers.edu/home/academic-integrity-policy/>
<https://studentconduct.rutgers.edu/processes/university-code-student-conduct>