

FDSCTE 4536 / PUBHEHS 4530 Food Safety and Public Health

Instructor: Dr. Brian Waters (waters.200@osu.edu)

Credit Hours: 2

Office Hour: 214A Howlett Hall, 2:00 – 3:00 Monday, or by appointment

Class Time and Location: Wed. and Fri. 10:20 – 11:15, 114 Parker

Prerequisites

MICRO 4100 (General Microbiology) or permission from the instructor

Objectives

Upon completion of this course, a student should be able to:

- 1) Define food safety, and describe how this definition has changed over time.
- 2) Describe the characteristics of important foodborne pathogens.
- 3) Explain the principles behind the spread and control of foodborne health threats.
- 4) Describe the characteristics of important non-microbial foodborne health threats.
- 5) Provide detail about several key technologies (thermal, chemical, and nonthermal) used in the control of foodborne health threats.
- 6) Describe key government and industry programs to increase food safety
- 7) Describe the impacts of food safety on business and society

Textbook: There is no required text for this course. Readings will be provided and assigned throughout the semester.

Grading: Your grade will be determined by exams and enrichment activities. The maximum number of points that can be earned in this class is **375**. The OSU standard scale (shown below) for percentages will be used.

Scale:

A	A-	B+	B	B-	C+	C	C-	D+	D	E
> 93	90-92	87-89	83-86	80-82	77-79	73-76	70-72	67-69	63-66	< 62

Exams: There will be a total of 3 midterm exams and one final exam. The midterm exams are worth 50 points each, and the final exam is worth 75 points. The final exam will be cumulative in nature.

Enrichment Activities: Most Friday sessions of this class are devoted to activities designed to explore the concepts covered on the previous lecture. There are a total of 10 activity days in this class. Each activity will count 15 points, for a total of 150 points for all activities.

Bonus Quizzes, Activities, and Discussions: Occasionally, bonus opportunities will become available. These opportunities can take the form of quizzes, activities, or discussions. These opportunities are only available for a limited time, so make sure you take advantage of them when they are announced.

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Academic Misconduct: Academic misconduct will not be tolerated. Work turned in in which academic misconduct is apparent will be referred to the Committee on Academic Misconduct. It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct at <http://studentconduct.osu.edu>.

Disability Services: Any student who may need an accommodation based on the impact of a disability should contact me to discuss your specific needs as soon as possible. The Office for Disability Services assists faculty in verifying the need for accommodations and developing accommodation strategies. If you have not done so, you are encouraged to contact the Office for Disability Services at 614-292-3307 in 150 Pomerene Hall to register your disability

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Course Calendar:

Date	Lecture	Enrichment Activity/Midterm
	Foodborne Pathogens: Bacteria	Introduction to Food Safety Literature
	Foodborne Pathogens: Viruses	Food Safety Literature: Norovirus
	Foodborne Pathogens: Prions and Parasites	Geography of Parasitic Infestations and Climate Change
	Midterm #1 Review	Midterm #1
	Non-Microbial Threats in Food Safety	Case Studies
	Concepts of Food Safety	Food Safety Literature: Concepts in Food Safety
	Methods of Food Protection	Food Safety Literature: Gauging Antimicrobial Activity
	Midterm #2 Review	Midterm #2
	Epidemiology and Risk Analysis	Constructing a Microbial Risk Analysis
	Spring Break	
	Federal Policy and Food Protection	Designing a HACCP plan
	Costs and Challenges of Food Safety	Budgeting for Food Safety
	Midterm #3 Review	Midterm #3
	Trends in Food Safety	ServSafe
		Guest Speaker
	Final Exam Review	