

Biology 309 (5 cr.)

Location: Halsey 202 (South end of building)
Monday, Wednesday, and Friday: 1:50 – 2:50 PM

Instructor: Dr. Eric Matson
Office: 253 Halsey Science Building
E-mail: matsone@uwosh.edu

Office Hours: **Mon. 3:00 – 4:00 pm and Wed and Fri. 12:30 – 1:30 PM**

Required Text: “Microbiology” 9th ed. by Prescott et al. with Connect access.

You have a couple of options here:

1. **The works:** Hard copy of 9th edition bundled with Connect access runs about \$237
2. **eBook:** Electronic copy of 9th edition bundled with Connect access runs about \$85
3. **Mix and match:** Stand alone access to Connect 9th edition runs \$50, then you are free to find a used copy of the 8th edition.

Option 3 is not ideal, but would work since the figures and text in the book haven't changed much.

Laboratory: 171 Halsey Science Center (North end of building)
Laboratory Instructors: Dr. Eric Matson, Vicki Verbrick

Purpose:

To introduce students to a variety of fundamental concepts and applications in bacteriology and to provide a foundation for the future study of microbiology.

Requirements:

There is no attendance policy for the lectures. You must have an acceptable and prearranged excuse for missing class on exam days or you will **not** be able to make-up exams. Exam dates are firm.

In general, class lectures will follow the textbook and the schedule of lectures. It should be noted that while the book will serve as a framework for lectures, there will be quite a bit of material presented in class that is not found in the text. You will be responsible for such material on exams. Thus, if you miss lecture you should obtain notes from a classmate.

Course Grading:

The lecture portion of the course is worth 60% of your grade. The laboratory accounts for the remaining 40%. The final grades will be based on total points and will use the following criteria:

- a) Exams** - There will be four lecture exams (100 points each). Exams will be of multiple choice and short-answer format. In addition, homework and in-class assignments will constitute additional points (100 points total). There will also be one writing project (100 points). *Information about this project will be provided in a separate document. Thus, there will be 600 points possible for the lecture portion of the course.*
- b) Laboratory** – A lab practical final exam (100 points), lab reports (200 points total) and lab questions or assignments (100 points) make up the total points in the laboratory portion of the

course. **Thus, there will be 400 points possible for the laboratory portion of the course.** In general, there are no make-up labs and laboratory assignments must be turned in in-person during the laboratory period. Missing labs will cause you to lose valuable points and will quickly detract from your overall grade for the course.

Course Grades will be determined using the following scale (final grades may be “curved” depending on final class average using lab and lecture grades:

92.5 - 100% = A	72.5-77.4% = C
90.0-92.4% = A-	70.0-72.4%= C-
87.5-89.9% = B+	67.5-69.9%=D+
82.5-87.4% = B	62.5-67.4% = D
80.0-82.4% = B-	60.0-62.4% = D-
77.5-79.9% = C+	<60% = F

NOTE: *If you miss an ‘unexcused’ lab session, you will NOT be able to hand in lab questions or assignments for that lab. If you must miss a lab, please discuss the circumstances with your lab instructor prior to the lab period!*

Lecture Changes

Any changes to the course, including lecture cancellations, etc. will be posted to the class D2L site and a class e-mail will be sent out using the D2L class roster.

You MUST check your e-mail regularly! Handouts, lab modifications, and additional materials will be placed on D2L.

Academic Dishonesty

If you are caught cheating or engaging in forms of academic dishonesty, you will receive an F on that assignment and be subject to the Student Academic Disciplinary Procedures as outlined in the Student Disciplinary Code (<http://www.uwosh.edu/dean>). Cheating includes, but is not limited to:

- Copying directly from sources and claiming the information as your own (plagiarism)
- Making up information or giving false information
- Giving answers to someone or allowing them to copy your work
- Possessing a copy of an examination that you should not possess
- Turning in work that was completed by someone else
- Turning in work for someone else during a lab period during which that person was absent
- Using notes or other information during an examination
- Copying from another student with or without their consent
- False excuses to receive due date extension

Bio 309 Spring 2014 Tentative Lecture Schedule

The schedule of topics may change depending on the pace of the course and class interest. Exam dates are firm! Please note that there will not be time to cover all topics for which you will be responsible. My aim is to bring clarity to aspects of the text. You will struggle with exams if you do not read and understand the assigned chapters in the book.

September	Topics covered
Week of Feb. 3	Introduction to the course and its organization Chapter 1: Evolution of Microorganisms and Microbiology
Week of Feb. 10	Chapter 2: Microscopy Chapter 3: Bacterial Cell Structure
Week of Feb. 17	Chapter 4: Archaeal Cell Structure Chapter 7: Microbial Growth
Week of Feb. 24	Chapter 8: Control of Microorganisms in the Environment <i>Brief review of cell structure, growth and control</i>
Friday, Feb. 28	Exam 1
Week of March 3	Chapter 9: Antimicrobial chemotherapy Chapter 10: Introduction to Metabolism
Week of March 10	Chapter 11: Catabolism
Week of March 17	Chapter 11: Catabolism Chapter 12: Anabolism
Week of March 24	Spring Break - No class
Week of March 28	Chapter 12: Anabolism <i>Brief review of metabolism</i>
Friday, April 4	Exam 2

Week of April 7	Chapter 13: Bacterial Genome Replication and Expression Chapter 14: Regulation of Bacterial Cellular Processes
Week of April 14	Chapter 14: Regulation of Bacterial Cellular Processes Chapter 16: Mechanisms of Genetic Variation
Week of April 21	Chapter 19: Microbial Taxonomy and the Evolution of Diversity <i>Brief review of bacterial genetics, biotechnology, and bioinformatics</i>
Friday, April 25	Exam 3
Week of April 28	Chapter 20: The Archaea Chapter 21, 22, 23, 24: The Bacteria (<i>selected topics</i>)
Week of May 5	Chapter 21, 22, 23, 24: The Bacteria (<i>selected topics</i>)
Week of May 12	Chapter 35: Pathogenicity and Infection Humans as a microbial ecosystem <i>Brief review of bacteria and pathogenicity</i>
Friday, May 16	Exam 4