

Microbiology Lab

BIOL 310L

Fall 2018

Course Syllabus

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Office: 216 RITA

Office Hours: Tuesdays 2:00-3:15 or by appointment

I will do my best to respond to all e-mails within one business day.

Microbiology Lab (310L): RITA 167

Ms. Tracy Hirsch (Sections 4, 5, and 7, T 3:25, W 12:10, R 12:10)

Dr. Susan Morrison (Section 6, W 3:15)

Dr. Matthew Rhodes (Section 2, T 12:10)

(I have no idea how the section numbers were assigned)

Required Texts and Materials:

Textbook: Techniques in Microbiology Student Handbook ISBN:9780132240116

In addition to the textbook a series of course handouts will be posted on OAKS. These texts are your primary resource for laboratory and must be used to prepare yourself for lab and to study for your laboratory exams. The reading of the proper manual(s) PRIOR to the beginning of laboratory is crucial. You must come to lab prepared to safely do the assigned experiments for that day. Failure to do so will put the safety of you and your classmates at risk.

Binder: Lab handouts should be stored in a 3-ring binder. The binder and the textbook should be brought with you every week to class. Blank pages should be available for notes on your unknown experiments.

Lab Coat: A lab coat will be mandatory for every lab. If you do not have a lab coat you will not be allowed to participate.

Closed Toed Shoes: Closed toed shoes will be mandatory for every lab. If you do not have closed toed shoes you will not be allowed to participate.

General Course Information: This course begins by examining the shapes, sizes, and structure of microorganisms so students become familiar with the world of microbiology. We will then look at microbial growth and how the growth of microbes can be controlled as well as the means by which microbes obtain energy (physiology), and the flow of information within a microbial cell. We will end with a brief look at computational techniques and an independent project conducted by the students.

Personal Protective Equipment: A lab coat and closed toed shoes are required to participate in all labs and lab exams. Procurement and maintenance of the lab coat is the student's responsibility.

Course Objectives: The goal of this course is to obtain practical experience in dealing with microorganisms.

1. Use a microscope.
2. Perform Gram Staining and other staining techniques.

3. Identify different microbes based on their metabolic needs.
4. Isolate individual microbes.
5. Understand what controls microbial growth in an environment.
6. And others...

Grading: The lab will make up 25 % of your final grade. Breakdown for laboratory points is as follows:

Lab Practical	100
Lab Reports (20)	60
Lab Quizzes (Best 3 of 4)	30
Pathogen Presentation	20
Unknown Report	20
Participation/Attendance	5

Practical

At the end of the semester a practical will be given. The practical will require knowledge of the concepts behind laboratory techniques as well as the ability to perform them.

Make-up exams are purely at the discretion of the professor and are reserved for extreme circumstances only. There is no obligation of the professor to provide make-up exam opportunities. Contact your professor as soon as possible if you think you will or if you have missed an exam. No make-ups will be administered after a 48-hour period. See other attendance policies.

Quizzes

4 in-class quizzes will be given. If a student misses a quiz they will receive a zero for that quiz, which has the potential of being dropped only if it is the lowest of the 4 quizzes. There is no obligation of the professor to provide make-up quiz opportunities.

Extra-Credit

Extra-credit opportunities are of the sole discretion of the professor; there is no obligation of the professor to provide extra-credit opportunities. IF an extra-credit opportunity is provided it will be provided to the entire student body of all of the professor's sections of the class. There will be NO personal extra-credit assignments. These potential extra-credit assignments will be announced in class and are not presented in the syllabus' grade computation.

Lab Attendance

Attendance at your registered lab meeting time is mandatory. Given the nature of Microbiology lab, making up a lab is not possible. If a quiz is given during a lab you miss, you will receive a zero for the quiz. Missing lab will also affect your lab report grade, since you will not have data to report. If you miss 2 or more labs, for any reason, then you will receive a WA (withdrawn for excessive absences). This affects your GPA similar to receiving an 'F'.

Syllabus/Schedule Modifications (See Tentative Schedule on OAKs)

The professor may change this syllabus/schedule as the semester progresses depending on the learning environment. Students will be notified of changes during class and through the course website. The professor is not responsible if a student does not learn of changes due to absence from class.