

Microbiology Lab

BIOL 310L

Fall 2018

Course Syllabus

Email: rhodesme@cofc.edu

Office Phone: (843) 953-8087

Office: 119 RITA

Office Hours: W 2:00-3:30, R 10:00-11:30 and by appointment

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

Feel free to come by outside office hours. If my door is open come on in.

If it is closed feel free to knock.

Microbiology Lab (310L): RITA 167

Ms. Tracy Hirsch (Sections 3, and 4, W 9:00, W 12:15)

Dr. Matthew Rhodes (Section 1, 2, and 6, T 9:00, T 12:15, R 12:15)

Required Texts and Materials:

Textbook:

Required: A digital lab manual will be made available to download.

Recommended: Techniques in Microbiology Student Handbook ISBN:9780132240116

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.

Notebook: In addition to your binder you should have a stitch bound (not spiral) laboratory notebook. Prior to lab you should read through lab materials and take notes on the protocols. You should also write out the steps for all experiments to be done that day in a numbered list to refer to.

You should leave the first page blank to serve as a table of contents.

During lab, any amendments or adjustments to the procedures should be recorded in your lab notebook. All results should be documented notebook.

Your lab notebook will be collected and graded 2-3 times during the course of the semester. It will also serve as your study guide for the practical.

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 is 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 Notebook (3 Checks)	60
Unknown 1	20
Unknown 2	40
Lab Quiz	30
Total	250

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.

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.

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.