

Microbiology Laboratory

Biology 239L-501

Spring 2016

Instructor: Dr. Melanie Sanchez-Dinwiddie

Office: Room 132, Academics Building

Office hrs: I am here for *you* to succeed. If you need to see me outside of class please stop by anytime or schedule an appointment. I will be in my office during the following scheduled times: Monday, Tuesday, or Thursday 1:15-2:30.

E-mail: The preferred method of contact: melasanc@unm.edu

Phone: 925-8875

Meeting Place: Health Science Building, Room 110

Time: Wednesday 10:30-1:15

Course Description:

This course is taken concurrently with Biology 239. It focuses on basic microbiology laboratory techniques with emphasis on identification of organisms. You will be working with live bacterial cultures. Proper aseptic technique must be used at all times.

Required Text:

Microbiology: Laboratory Theory and Application by Leboffe and Pierce, 2012, 2nd edition, Morton Publishing.

Student Learning Objectives:

At the completion of this course the student will be able to:

- demonstrate basic microbiological techniques,
- describe microbes similar to those encountered in the clinical setting,
- demonstrate safety precautions in the laboratory,
- interpret results of microbiological tests,
- use their knowledge and critical thinking techniques to identify an unknown bacterium.

Course Requirements:

Attendance. Attendance is necessary for you to participate in lab as well as to fully understand the material presented. This means getting to class on time and completing the exercises covered. After three absences you can be dropped from the class. The student will be held responsible for all material and information regardless of whether the student was in lab. Contact fellow students for information on the material missed.

UNM Learn. This is where you will find course materials and pre-lab assignments: learn.unm.edu. You will need to access Learn regularly.

Withdrawal. If a student drops the course after the deadline to drop without a grade, Friday, February 5th, a grade of W may be given. It will be at the instructor's discretion whether a W will be granted. This means by withdrawing you may earn a grade of F or not allowed to withdraw. If you withdraw from the lab you will also be withdrawn from lecture and vice versa.

Financial Assistance. It is the student's responsibility to maintain funding for their education.

Make-up Exams. There are no make-up exams in this course. Make-up quizzes are given at the instructor's discretion. Only one make-up quiz will be given.

Cell phones. As a courtesy to the class, please turn off all cell phones or pagers. DO NOT TEXT MESSAGE DURING CLASS. Any sight of a cell phone during exams or quizzes will result in an automatic fail for that assignment.

Food. There will be NO food or drink in the lab room.

Special Needs:

Qualified students with disabilities needing appropriate academic adjustments should contact the instructor by the end of the 1st week of the semester to ensure that your needs are met in a timely manner.

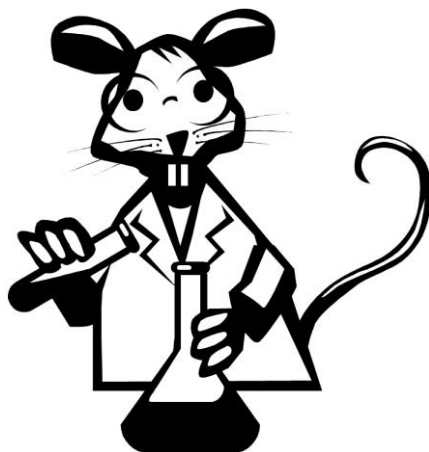
Unknown Identification: One of the major goals of this laboratory is for each student to identify an unknown organism using the skills, techniques and knowledge gathered throughout the semester. Therefore you will need to keep a laboratory notebook where you will record all of your results in an organized manner. At the end of the semester you will compose a dichotomous key that will be used in your unknown identification.

Grading policy: The laboratory grade will count for 30% of your overall microbiology grade. The remaining 70% you earn in Dr. Chavez's lecture portion. The laboratory grade will be determined as follows:

Quizzes (4 out of 5)	25%	Midterm	15%
Pre-lab Quizzes	10%	Final Exam	20%
Lab Reports	10%	Lab Attendance/Participation	5%
Unknown	15%		

Pre-lab Quizzes: You are required to read the chapter that is to be presented in class *prior* to class and answer questions that address the material. During class I will have designed activities that requires you to discuss information, use the material, or solve problems. In order for this to benefit you the most you will need a basic understanding of the material being addressed. The pre-lab quizzes are designed to prepare you for in class activities and therefore are due by class time. If you miss the pre-lab quiz for that day there is no make-up opportunities. In every reading quiz the first question will ask: "Defend the learning objective you find most important." In every reading quiz the last question will ask: "After reading this chapter EXPLAIN what is unclear." I will be grading these questions based on effort, and thought.

Lab Coat: Each student will provide a laboratory coat or other protective clothing to be left in the lab until the end of the semester.



Microbiology Laboratory Schedule – Spring 2016

Week	Day	Exercise	Quiz
1	January 20	Lab Safety Exercise 1 – Fundamental Skills for the Microbiology Lab Sections 1-1, 1-4, and 1-5	
2	January 27	Exercise 2 – Microbial Growth Sections 2-1, 2-2, and 2-8	
3	February 3	Exercise 3 – Microscopy and Staining Sections 3-4 and 3-10	Quiz #1
4	February 10	Exercise 3 – Microscopy and Staining Section 3-6	
5	February 17	Exercise 3 – Microscopy and Staining Sections 3-7, 3-8, 3-9, and 3-11	Quiz #2
6	February 24	Exercise 4 – Selective Media Sections 4-3 and 4-4	
7	March 2	Review for Midterm	Quiz #3
8	March 9	Midterm Exam	
9	March 16	Off –Spring Break	
10	March 23	Exercise 5 – Differential Tests Sections 5-2, 5-8, and 5-9	
11	March 30	Exercise 5 – Differential Tests Sections 5-12, 5-15, and 5-18	
12	April 6	Exercise 5 – Differential Tests Sections 5-4, 5-10, 5-11, 5-21, and 5-22	Quiz #4
13	April 13	Exercise 6 – Quantitative Techniques Section 6-2 Exercise 7 – Medical Microbiology Introduction Section 7-2	
14	April 20	Exercise 9 – Identification of Unknown Sections 9-1 and 9-2	Quiz #5
15	April 27	Exercise 9 – Identification of Unknown	
16	May 4	Final Exam	

***Please Ask Questions Anytime You Are Unsure of Anything!!!
This Lab is not the place to be unsure.***