

Microbiology for Health Science Students
Biology 239-501
Spring 2016
Syllabus

Meeting time and Place:

Lecture: Health Sciences Building, Room 101
Monday & Wednesday 9:00-10:15 AM
Lab: Health Science Building, Room 110
Wednesday 10:30-1:15 PM

Lecture Instructor: Dr. Miriam J. Chávez
Office: Room 100B, Health Science Building
Office Hours: Monday & Wednesday 8:00-9:00 and 10:30 to 11:30 a.m.
Tuesday & Thursday 9:00-10:30 a.m.
Phone: 925-8613
E-mail: mjchavez@unm.edu

Prerequisites:

Biology 123 and 124L and Chemistry 111L or 121L with a grade of C or better.

Course Description:

Introduction to microbiology with emphasis on principles of infection and immunity. It is a four credit hour biology class.

Student Learning Objectives:

At the completion of this course. Students will be able to:

1. Prokaryotic cells
 - a. compare and contrast gram positive and gram negative bacteria
 - b. explain bacterial growth
 - c. summarize bacterial metabolism and genetics
2. Control microbes
 - a. describe the process of physical and chemical control
 - b. explain the affect of antimicrobials on bacteria
3. Microbe-Human interactions
 - a. describe the virulent factors that bacteria use to cause infection
 - b. explain how the host protects from microbes
4. viruses
 - a. explain the structure of viruses and how they cause infection
 - b. summarize the affect of HIV

Required Learning Resources:

1. Text: Foundations in Microbiology (Basic Edition) by Talaro, 9th edition, 2015, McGrawHill Publisher. You must have the access code for McGraw Hill Connect.

<http://connect.mheducation.com/class/m-chavez-valencia---microbiology---spring-2016>

2. Course Webpage: <https://learn.unm.edu/> . The webpage contains resources you need to succeed in the course. Login using your UNM user name and password. ***You are responsible for all announcements & changes to the syllabus posted on the webpage.***

3. LearnSmart: There is a LearnSmart assignment for every chapter covered. There will be ten homework assignments that must be completed at the McGraw Hill Connect webpage.

You will earn fifty total points for completing all the LearnSmart (LS) assignment readings and ten points for each homework. To earn full credit, you must do assignments and homework by the due date. You will only earn 50% of total possible points if assignments or homework are completed in the week following the due date. There will be NO points earned if assignments or homework are completed after one week from due date.

Course Requirements:

- **Attendance.** Attendance is necessary for you to participate in class as well as to fully understand the material presented. You are responsible for “signing-in” to document your attendance. This means getting to class on time, remaining for the entire class period, & actively participating. If you are missing more than 15 min. of class, it will count as an absence. Unless otherwise advised, after four 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 class.
- **Make-up Exams.** Make-up exams (essay format) will be given to students with a documented emergency. You must notify the instructor the day of the missed exam.
- **Quizzes.** Make-up quizzes will be given to students with a valid excuse.
- **Withdrawal.** If a student drops the course before February 5, it will not appear on their transcript. After February 5 a “W” will be issued
- **Cell phones.** As a courtesy to the class, please turn off any cell phones or pagers. PLEASE DO NOT TEXT MESSAGE DURING CLASS. Any sight of a cell phone during exams or quizzes will result in an automatic ZERO for that assignment.
- **Disruptive behavior.** Please avoid any disruptive behaviors in the classroom. This includes going in and out of the class, texting, talking.
- **Plagiarism.** Only submit work that is yours. Always cite any work used as a reference using APA format.

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.

Academic Dishonesty:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Grading Criteria for Assigning Final Course Grade:

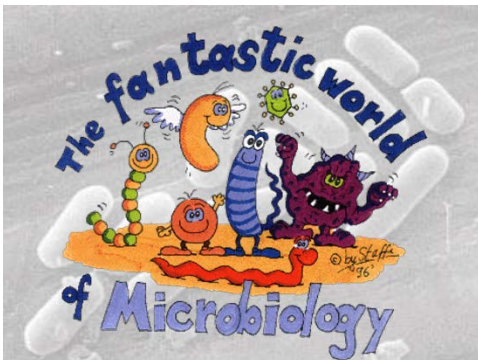
Lecture will count for 70% of the course grade, as follows:

Exams (3)	300 points
Final Exam	110 points
Quizzes (4)	40 points
Written Reports	30 points
LearnSmart Readings	50 points
Connect Homework (9)	90 points
Attendance	30 points

Lab will count for 30% of the course grade.

The grade earned will be based on the following percentage:

100 or higher – A+	77-79 – C+
94-99 – A	73-76 – C
90-93 – A-	70-72 – C-
87-89 – B+	60-69 – D
83-86 – B	below 60 – F
80-82 – B-	



LECTURE -- COURSE OUTLINE

	Chapter	Quiz
January 20 – February 10		
Main Themes of Microbiology	1	Feb. 1
Tools of the Laboratory	3	
Survey of Procaryotic Cells ..	4	
Microbial Nutrition, Ecology & Growth	7	

EXAM I ---- Monday, February 15

LearnSmart Readings (15 points) for chapters due on Sunday, February 14

Connect Homework 1, 2, and 3 due on Sunday, February 14

February 17 – March 9		
Microbial Metabolism	8	
Microbial Genetics & Genetic Engineering	9 & 10	Feb. 29
Physical & Chemical Control of Microbes	11	
The Elements of Chemotherapy	12	

Spring Break – March 14-18 - No classes

EXAM II ----Monday, March 21

LearnSmart Readings (20 points) for chapters due on Sunday, March 20

Connect Homework 4, 5, 6, and 7 due on Sunday, March 20

March 23 – April 13		
Microbe-Human Interactions	13	
Host Defenses	14 & 15	Apr. 4
Diagnosing Infections	17	

EXAM III ---- Monday, April 18

LearnSmart Readings (15 points) for chapters due on Sunday, April 17

Connect Homework 8, 9, and 10 due on Sunday, April 17

April 20 – May 4		
Introduction to Viruses	6	May 2
HIV Disease		

FINAL EXAM – Wednesday, May 11 at 9:00 AM

*I reserve the right to make needed and appropriate adjustments in this syllabus.