

Biology Lab for Non-Majors ONLINE
Biology 112-502
Spring 2018
Syllabus

Instructor: Dr. Miriam J. Chávez
Office: Room 100B, Health Science Building
Office Hours: Monday – Thursday 8:00 - 9:00 a.m.
Monday & Thursday 10:30 to Noon

Phone: 925-8613

E-mail: mjchavez@unm.edu

Course Description:

This lab will cover similar topics that are discussed in Biology 110. You must be either enrolled in a Biology 110 class this semester or must have taken it previously. Credit is not applicable toward biology major or minor.

Course Learning Objectives:

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

1. Introduction to biology
 - a. Explain the nature and process of science
 - b. Analyze data, construct and interpret graphs
 - c. Critically evaluate scientific information and develop a testable hypothesis to explain phenomena of the natural world
2. Chemistry
 - a. Describe the atomic structure of an atom
 - b. Identify macromolecules of life and explain how their structures relate to their functions in cells
3. Cells
 - a. Describe how cellular structures and functions are related
 - b. Explain energy transformation pathways in autotrophs and heterotrophs
4. Genetics
 - a. Describe the DNA structure
 - b. Explain the basic mechanisms of inheritance from the molecular to organismal level
5. Ecology and evolution
 - a. Define biological evolution by natural selection and explain microevolution and macroevolution
 - b. Explain the basic principles of ecology and population, community and ecosystem levels

Required Learning Resources:

1. **NO TEXT NEEDED** – You will either be doing some experiments in your home, case studies or virtual labs at various websites.
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, tests and/or any changes to the syllabus will be posted on the webpage. I strongly urge you to check each week for assignments and due dates.***
3. **Technology & Computer:** In this course, you will need the following technology and computer requirements.
 - Dependable computer
 - Reliable internet connection
 - Computer speakers
 - Reliable web browser
 - Microsoft Suite (PowerPoint and Word)
 - Adobe Flash Player
 - Ability to use Blackboard Learn

If you need help or have questions, please let me know.

Course Information:

- **Assignments.** All Assignments are to be completed and submitted through Blackboard Learn by Friday of the week.
- **Late assignments.** Late assignments will only be accepted within the first week following the due date. There will be a 50% reduction in grade. I will not accept assignments after the first week.
- **Exams.** Midterm and Final exam will be available through Blackboard learn.
- **Withdrawal.** If a student drops the course before February 2 appear on their transcript. After February 2 a “W” will be issued.
- **Drop policy.** If the student has missed three assignments, he/she will be dropped from the class

Tips for Success in Class:

- **Labs.** Most labs will require about one hour. Make sure that you have the required time to record results.
- **Office hours.** I am available to help you succeed in the class; stop by my office and I can clarify information or help you with homework.
- **Email netiquette.** Include an informative subject line (class and concern -- Bio 112L, lab mitosis); include a salutation and closing (sign your name); do not use IM or TXT spelling, but instead use standard English.

- **SAGE.** SAGE (Student Alerts and Grouped Events) is the new Early Alert referral program I will use to send out emailed alerts to both students and staff regarding student progress. This enables streamlined communication between faculty, students and staff to help students succeed at Valencia. Students may receive SAGE referrals on tutoring needs, grades, attendance issues, missing assignments, etc., as well as kudos for a job well done.

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.

Equal Opportunity and Non-discrimination:

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered “responsible employees” by the Department of Education (see page 15 - <http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf>). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>.

Grading Policy:

The course grade will be determined as follows:

Weekly Labs (12)	300 points
Midterm Exam	75 points
Final Exam	75 points

There is a total of 450 possible points. The students earned points will be divided by the total points and grades earned will be based on percentage as follows:

100 or higher -- A+	90-99 -- A
80-89 -- B	70-79 -- C
60-69 -- D	below 60 -- F

NOTE – *If a student fails to log into Blackboard Learn by the beginning of the second week in the semester, the student will be dropped from the class.*

Laboratory Outline

Week	Week of	Lab Assignment
1	January 15	Introduction
2	January 22	Scientific Method – Metric System
3	January 29	Chemistry
4	February 5	The Cells
5	February 12	Cellular Transport
6	February 19	Cellular Respiration
7	February 26	DNA Biology Review for Midterm
8	March 5	Midterm Exam
9	March 12	<i>Spring Break – No Labs Due Enjoy your time off!!!!</i>

10	March 19	Mitosis & Meiosis
11	March 26	Mendelian Genetics
12	April 2	Human Genetics
13	April 9	Evidence of Evolution
14	April 16	<i>Thanksgiving Break – No Labs Due Enjoy your time off!!!!</i>
15	April 23	Natural Selection Review for Final Exam
16	April 30	Final Exam

** I reserve the right to make necessary changes throughout the course.