

# Biology 112—502 Syllabus

## COURSE INFORMATION

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.

## STUDENT LEARNING OBJECTIVES

The course is divided into 5 modules and at the completion of this course, student will be able to:

### Introduction to biology

- Explain the nature and process of science
- Analyze data, construct and interpret graphs
- Critically evaluate scientific information and develop a testable hypothesis to explain phenomena of the natural world

### Chemistry

- Describe the atomic structure of an atom
- Identify macromolecules of life and explain how their structures relate to their functions in cells

### Cells

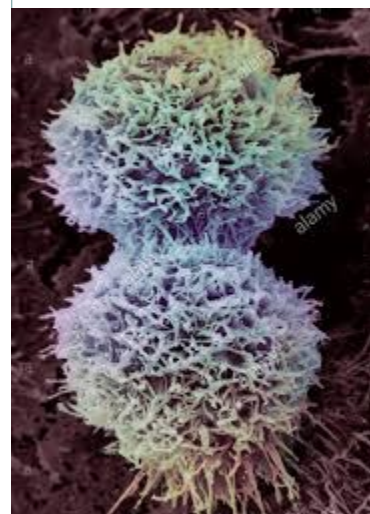
- Describe how cellular structures and functions are related
- Explain energy transformation pathways in autotrophs and heterotrophs

### Genetics

- Describe the DNA structure
- Explain the basic mechanisms of inheritance from the molecular to organismal level

### Ecology and evolution

- Define biological evolution by natural selection and explain microevolution and macroevolution
- Explain the basic principles of ecology and population, community and ecosystem levels



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## INSTRUCTOR

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## 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, assignments, quizzes, tests and/or any changes to the syllabus will be posted on the webpage.***

**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)

*“If you can dream it, you can do it” — Walt Disney*

### COURSE POLICIES

**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 September 7 appear on their transcript. After September 7 a “W” will be issued.

**Drop policy.** If the student has missed three assignments, he/she will be dropped from the class

### THINGS TO KEEP IN MIND

#### Special Needs:

Qualified students with disabilities needing appropriate academic adjustments should contact the instructor by the end of the 1<sup>st</sup> 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](http://oeo.unm.edu)). For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>.



*Develop good study habits. Don't wait until the last minute.*

## GRADING CRITERIA—

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.***

## TIPS FOR SUCCESS

**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.

# COURSE OUTLINE

Week	Week of	Lab Assignment
1	August 20	Introduction
2	August 27	Scientific Method – Metric System
3	September 3	Chemistry
4	September 10	The Cells
5	September 17	Cellular Transport
6	September 24	Cellular Respiration
7	October 1	DNA Biology Review for Midterm
8	October 8	<i>Fall Break – No Labs Due</i>
9	October 15	<b>Midterm Exam</b>
10	October 22	Mitosis & Meiosis
11	October 29	Mendelian Genetics
12	November 5	Human Genetics
13	November 12	Evidence of Evolution
14	November 19	<i>Thanksgiving Break—No Lab due</i>
15	November 26	Natural Selection Review for Final Exam
16	December 3	<b>Final Exam</b>