

Biology 1110L—502 Syllabus Modality: Online

GENERAL INFORMATION

Instructor:	Dr. Piotr Filipczak
Phone Number:	505-925-8876
Email:	pfilipczak@unm.edu
Office Hours:	Tuesday and Thursday, 4:00 pm to 4:30 pm via Zoom
Office Number:	VAAS 132A
Meeting Room:	Online via Canvas
Meeting Time:	Asynchronous

COURSE INFORMATION

This laboratory course for non-science majors compliments the concepts covered in the associated general biology lecture course. Students will learn quantitative skills involved in scientific measurement and data analysis. Students will also perform experiments related to topics such as biochemistry, cell structure and function, molecular biology, evolution, taxonomic classification, phylogeny, biodiversity, and ecology.

COURSE LEARNING OUTCOMES

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

- Introduction to biology
- Employ critical thinking skills
- Analyze data/information and draw conclusions
- Communicate effectively about scientific ideas and topics
- Chemistry
- Identify macromolecules of life and explain how their structures relate to their functions in cells
- Describe how cellular structures and functions are related
- Genetics
- Explain the basic mechanisms of inheritance from the molecular to organismal level
- Develop an understanding of biodiversity
- Ecology and evolution
- Define biological evolution by natural selection
- Explain the basic principles of ecology and ecosystems

REQUIRED LEARNING RESOURCES

1. **NO TEXT NEEDED** – You will either be doing some experiments in your home, analyzing case studies, or virtual labs at various websites.
2. **Course Webpage:** <https://learn.unm.edu/> . The webpage contains re-sources you need to succeed in the course. Login using your UNM user name and password. **You are**

responsible for all announcements, assignments, 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 (Word)

TIPS FOR SUCCESS

If you are feeling lost or overwhelmed

- **Labs.** Most labs will require between one to two hours to complete. Make sure that you have the required time to record results and submit your work.
- **Office hours.** I am available to help you succeed in the class; stop by my office (or schedule individual Zoom appointment) and I can clarify information or help you with homework.
- **Email netiquette.** Include an informative subject line (class and concern -- Bio 1110L, lab mitosis); include a salutation and closing (sign your name); do not use IM or TXT spelling, but instead use standard English.

Accommodations:

If you have a documented disability and you need a reasonable accommodation made for you in this course, please consult with me immediately at the outset of the course so we can design a solution that will help you be successful in the class.

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 mis-representation 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 Co-ordinator 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 CRITERIA

The course grade will be determined as follows:

- Intro to Course 25 points
- Weekly Labs (12) 300 points
- Midterm Exam 75 points
- Final Exam 75 points

There is a total of 475 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 Canvas by the end of the second week in the semester, the student will be dropped from the class.*

Develop good study habits. Don't wait until the last minute. Give yourself plenty of time to complete assignment.

COURSE OUTLINE

<u>Week</u>	<u>Lab Assignment</u>	<u>Due Date</u>
1	Introduction	8/29
2	Metric System	9/5
3	Chemistry	9/12
4	The Cells	9/19
5	Cellular Transport	9/26
6	Cellular Respiration	10/3
7	DNA Biology	10/10
8	Review for Midterm	
9	<i>Midterm Exam</i>	10/24
10	Mitosis & Meiosis	10/31
11	Genetics	11/7
12	Biodiversity	11/14
13	Evidence of Evolution	11/21
14	Natural Selection	11/28
15	Review for Final Exam	
16	<i>Final Exam</i>	12/12