BIOLOGY LAB FOR NON-MAJORS
Biology 1110L-550

Spring 2025

Syllabus

Instructor:	Dr. James Farslow
Classroom:	Online via Canvas (canvas.unm.edu) and lobomail. You must have a UNM net ID and access to a reliable internet service.
Class hours:	Asynchronous – At your convenience (explained below).
Office:	Online, via email (below), or Zoom
Office Hours:	Tuesday, 11:00 am – 12:00 pm, Zoom; Wednesday, 11:00 am – 12:00 pm, Zoom; Thursday, 11:00 am – 12:00 pm, Zoom; or by appointment (email me). Zoom meetings: https://unm.zoom.us/j/95159788948 Meeting Number: 951 5978 8948 These times may be subject to change. During the school week email me with questions or problems.
Email:	jfars@unm.edu (Best way to contact me during the school week. I do not usually respond to e-mail from Friday evening to Sunday evening.)

Course Description: This laboratory course for non-science majors compliments the concepts covered in the associated general biology lecture course. As this is an online course, we will not be conducting experiments at campus. Students will learn quantitative skills involved in scientific measurement and data analysis. Students will also view or perform experiments at home or virtually related to topics such as biochemistry, cell structure and function, molecular biology, evolution, taxonomic classification and phylogeny, biodiversity, and ecology.

Student Learning Objectives: At the completion of this course students will be able to:

1. Employ critical thinking skills to judge the validity of information from a scientific perspective.
2. Apply the scientific method to formulate questions and develop testable hypotheses.
3. Analyze information/data and draw conclusions.
4. Operate laboratory equipment correctly and safely to collect relevant and quality data.
5. Utilize mathematical techniques to evaluate and solve scientific problems.
6. Discuss the processes of natural selection and evolution.
7. Recognize biodiversity in different ecological habitats and communities of organisms.
8. Communicate effectively about scientific ideas and topics.

Text: None required. Material will be provided.

Computer Requirements: You will need to have access to a reliable internet service, preferably using a computer. My office hours will be conducted via Zoom during the times listed above. I will email you with the meeting ID number at the beginning of the semester, which will remain the same for the rest of the semester. Email me if you have any questions or problems. Be aware I do not usually respond to emails from Friday evening to Sunday evening.

Course Webpage on Canvas (canvas.unm.edu): Course information including this syllabus and grades will be available via canvas.unm.edu. This course will appear in your Canvas course listing. I will also send out emails to the class periodically. Students should check email at least every couple of days, if not every day.

Attendance Policy: As the class is asynchronous online, there is no attendance to be taken. However, assignments must be completed each week by the following Tuesday at midnight to be accepted. You have all week at your own convenience to read or watch the material and complete the assignment, so except for extreme circumstances, **there are no late assignments, quizzes, or exams**. It is the prerogative of the instructor to decide what is an extreme circumstance. Email me if you have something unusual that comes up that interferes with your ability to complete assignments. Quizzes and exams will be administered on Canvas and will be available from 8 am to midnight Thursday evening. The dates for the exams are on the course outline below.

Remember this course is separate from the lecture course, and all assignments, quizzes, and exams in this course are separate from the lecture.

It is not the responsibility of the instructor to drop you from the course if you stop attending or completing assignments. You may be dropped if you're not participating, but don't rely on that if you decide to drop. It is the student's responsibility to drop the course.

Academic dishonesty (from the UNM Catalog): "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, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been 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 on quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University."

Additionally:
Copying and pasting material from a webpage into your homework assignment is plagiarism and can result in a zero for the assignment. The same method you use to look up the information on the internet is probably the same method I will use to check if you copied it. All

I need to do is Google your answer, and yes, I do check. Researching a subject online is fine, but answer assignments in your own words.

Also, if you work on homework assignments together, make sure the assignment is in your own words and with your own graphs. Don't just copy what your study partner wrote down. Both of you will lose points if you do this. This also applies to anyone who allows someone to cheat off of them.

Student Behavior: All students will comport themselves as adults in an academic setting. On Zoom, be courteous and respectful. The same is true on the Discussion Board. Please read the Netiquette paper on the course materials page of Canvas.

Labs: All labs will be one of the following: something you watch on a video, something you do virtually online, or something you do at home with common materials. When conducting an experiment at home, please be careful and use common sense. The experiments should be straightforward and simple. Basic rules of the lab should still be followed: do not ingest materials you use for the lab, and be careful about getting things on your skin or in your eyes. Wear long shirt sleeves and eye protection when warranted.

Quizzes: Quizzes will be short assignments given periodically during the semester. They will be multiple choice and will be done on Canvas. Quizzes will be administered on Thursday of the week indicated in the class schedule (below). There are five quizzes worth 40 points each, and the lowest quiz grade will be dropped.

Assignments: Assignments will be sets of questions based on the lab and will be turned-in by Tuesday midnight of the following week. This will allow students time and access to a computer to complete the assignment. There should only be one answer per question on the assignments, unless it asks for more than one answer. Don't put down several things hoping to get one of them right; I'm liable to count it wrong. There are 13 assignments worth 10 points each.

Discussion Board: The Discussion Board is on Canvas. There will be questions posted each week, and students will respond with at least **three substantive** complete sentences about the topic to receive full credit. Do not just respond "That's interesting" or "Okay". If there are two parts to the question, make sure to address both parts for full credit. These discussion responses will count as 10 points each toward the student's grade. There is usually not a right or wrong answer. The questions are intended to stimulate thinking about the subject. Students **must** post their responses to me by Tuesday midnight of the following week for credit. Students are also encouraged to respond to each other and discuss the week's topic. The discussion board will be asynchronous, meaning that you need to remember you are sending messages that people can respond to when they are able, not a real-time conversation. Students are expected to treat each other and opposing viewpoints with respect. **No trolling.** Students will adhere to the principles of Netiquette, which can be found on the course Canvas site under Course Information. This should not, however, preclude students from disagreeing

or correcting each other, but do it respectfully. I do read all of your responses, but because of the number of responses I usually do not respond to them.

Exams: There will be a midterm and a final exam on Canvas, each worth 150 points. Exams are multiple choice.

The requirements to complete the course are the same for all students, whether undergraduate or dual-credit.

Grading Breakdown:

Quizzes (4 best @ 40 points each)	160
Assignments (13 @ 10 points each)	130
Discussion Board (13 @ 10 points each)	130
Midterm Exam	150
Final Exam	150
Total points	720

Final grades will be awarded based on the percentage of points earned relative to total points possible. **Note:** Please do not think at the end of the semester that if you have a 60% going into the final exam, you only need to make an 80% on the final to pass the course. **This is incorrect.** Remember the final exam is only 150 points out of 720. If you have a 60% for the course going into the final, you will not be able to pass the course, even if you get a 100% on the final. If, on the other hand, you make 70% or higher on all coursework and exams through the semester (that includes the final), you will pass.

Grade	From	To
A+	98	100
A	93	97.99
A-	90	92.99
B+	88	89.99
B	83	87.99
B-	80	82.99
C+	78	79.99
C	70	77.99
D	60	69.99
F	0	59.99

Extra Credit: Students can earn an extra credit of up to 30 points once for the semester if they review a research paper from the primary scientific literature. It must be primary research, not a review or opinion article, and it must be from a peer reviewed journal. Your review should be about 1000 words (about two pages double spaced). Clearly spell out at the top of your review (i.e., in your title) the title of the paper and the authors names, as well as the name of the

journal, and the issue and page number of the article. See me if you are interested in this for further details. I need to approve your article before you write the review.

Students with Disabilities: If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations are provided in a timely manner. If you require accommodations, please contact me as soon as practical.

Title IX Statement. 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 pg 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.

Course Outline

Date	Week	Subject	Quizzes
20-Jan	1	Introduction, Scientific Method, Metric Conversions	
27-Jan	2	Chemical Reactions	1
3-Feb	3	Biological Molecules	
10-Feb	4	Cells and Microscopes	
17-Feb	5	Osmosis And Diffusion	2
24-Feb	6	Photosynthesis and Cellular Respiration	
3-Mar	7	DNA Extraction and Fingerprinting	3
10-Mar	8	**Midterm Exam (13 Mar)**	
17-Mar	9	**Spring Break**	
24-Mar	10	Mitosis	
31-Mar	11	Meiosis	
7-Apr	12	Genetics	4
14-Apr	13	Natural Selection	
21-Apr	14	Process and Evidence of Evolution	
28-Apr	15	Biodiversity	5
5-May	16	**Final Exam (8 May)**	
12-May	17	No Class	

** Instructor reserves the right to make required changes during the course.