BIOLOGY LAB FOR NON-MAJORS
Biology 1110L-550

Spring 2026

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). Video material is equivalent to a 2 hour and 45 minute lab each week.
Office:	Online, via email (below), or Zoom
Office Hours:	Tuesday and Wednesday, 11:00 am – 12:00 pm, Zoom; or by appointment (email me). Zoom meetings: https://unm.zoom.us/j/94182693620 Meeting Number: 941 8269 3620 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 on related to topics such as biochemistry, cell structure and function, molecular biology, evolution, taxonomic classification and phylogeny, biodiversity, and ecology. The lab is a 1 credit hour course, but runs for approximately 2 hours and 45 minutes each week. Plan on up to 10 hours per week for watching material, taking notes, and doing assignments.

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. Video 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. 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, video material, and grades will be available via canvas.unm.edu. This course will appear in your Canvas course listing. The weekly videos and other material are under the Pages link (it will usually show the Welcome page again, I don't know why, with a button above it that says "View all pages"). You can also access Canvas via the Canvas student app. 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 and Late Assignment 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, or exams. Quizzes and exams will be administered on Canvas on Fridays. Each week, there will be a video (approximately 2 hours and 45 minutes each) posted under the Pages link of Canvas with the material for that week. Please watch the announcements at the beginning of the video each week so you're aware of what is coming up. The dates for the quizzes and exams are also on the course outline at the end of the syllabus. There are no resubmissions of assignments after grading.

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

It is not the responsibility of the instructor to drop you from the course if you choose to leave the course. It is the student's responsibility to drop the course. However, you may be dropped if you're not participating, but don't rely on that if you decide to drop. Not participating shall be defined as a period of 30 days without completing any assignments.

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."

This also applies to anyone who allows someone to cheat off of them.

Additionally:
Copying and pasting material from a webpage into your homework assignment is plagiarism. 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.

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.

With regard to the use of AI, a word of caution. AI can sometimes give you answers that are not correct. I have observed this myself, but I'm sure it depends on the specific AI. It would be better not to rely on AI for answers, but I don't prohibit the use of it for research or studying. Use it like you would use any search engine to gain information. Do not use it to answer the problems for you or to write your homework. And make sure to put your answers in your own words.

Sometimes, a lot of people's weekly assignments will have the same wrong answer. I suspect they are getting it from: a search engine, AI, or YouTube. If you are going to spend the time watching a YouTube to get the answer, why not just watch the video I post which will address the material of the question in the right context?

Student Behavior: All students will comport themselves as adults in an academic setting. Students will comply with the Student Code of Conduct. On Zoom, be courteous and respectful. The same is true on the Discussion Board. Please read the Netiquette paper on the Pages link of Canvas. Abusive or disruptive behavior will not be tolerated, and may result in disciplinary action. Repeated violations could result in removal from the course.

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.

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 answers 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 under the Discussion Board link. It's also under the assignments link. There will be questions posted in video format 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. Restating the question does not count toward the three sentences. These discussion responses will count as 10 points each toward the student's grade. There is no 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 the Pages link. 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.

Quizzes: Quizzes will be administered on Canvas on Friday of the week listed in the Course Outline below, and will be available from 8 am to midnight. The quizzes will be multiple choice, and you will have 30 minutes to complete them once you start. The quizzes will include material for the week they are posted. There will be 5 quizzes worth 25 points each, and the lowest quiz grade will be dropped. Quizzes are intended to be done individually, not as a group.

Exams: There will be a midterm and a final exam on Canvas, each worth 150 points. Exams are multiple choice. You will have one hour to complete the exam once you start. The dates for the exams are listed in the Course Outline below. Material for that week will be fair game for the exams. All exams are intended to be done individually. They are not a group effort.

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.

Accommodations: UNM is committed to providing equitable access to learning opportunities for students with documented disabilities. As your instructor, it is my objective to facilitate an inclusive classroom setting, in which students have full access and opportunity to participate. To engage in a confidential conversation about the process for requesting reasonable accommodations for this class and/or program, please contact Accessibility Resource Center at arcsrvs@unm.edu or 505-277-3506.

UAP 2720 and 2740. Our classroom and university should foster mutual respect, kindness, and support. If you have concerns about discrimination, harassment, or violence, please seek support and report incidents. Find confidential services at LoboRESPECT Advocacy Center, the Women's Resource Center, and the LGBTQ Resource Center. UNM prohibits discrimination on the basis of sex (including gender, sex stereotyping, gender expression, and gender identity). All instructors are "responsible employees" who must communicate reports of sexual harassment, sexual misconduct and

sexual violence to Compliance, Ethics and Equal Opportunity. For more information, please see UAP 2720 and UAP 2740.

Course Outline

Date	Week	Subjects	Quizzes
19-Jan	1	Introduction, Scientific Method, Metric Measurements	
26-Jan	2	Chemical Reactions	
2-Feb	3	Biological Molecules	Quiz 1 (6 Feb)
9-Feb	4	Cells and Microscopes	
16-Feb	5	Osmosis and Diffusion; Cellular Transport	Quiz 2 (20 Feb)
23-Feb	6	Photosynthesis and Cellular Respiration	
2-Mar	7	DNA Extraction and Fingerprinting	Quiz 3 (6 Mar)
9-Mar	8	**Midterm Exam (Friday, 13 Mar)**	
16-Mar	9	**Spring Break**	
23-Mar	10	Mitosis	
30-Mar	11	Meiosis	
6-Apr	12	Genetics	Quiz 4 (10 Apr)
13-Apr	13	Natural Selection	
20-Apr	14	Process and Evidence of Evolution	
27-Apr	15	Biodiversity	Quiz 5 (1 May)
4-May	16	**Final Practical Exam (Friday, 8 May)**	

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