

BIOLOGY LAB FOR NON-MAJORS
Biology 1110L-501
Fall 2019

Syllabus

Instructor: Dr. James Farslow
Classroom: Arts & Sciences, Room 135
Class hours: Thursday, 12:00 – 2:45
Office: Academic Office, Arts & Sciences, ask Receptionist
Office Hours: Tuesday, 1:30 – 3:30, in the STEM Center in LRC;
Thursday, 4:00 – 5:00, in the STEM Center in LRC;
or by appointment (email me)
Campus Phone: 505-925-8634 (only right before or right after class)
E-mail: jfars@unm.edu (Best way to contact me during the week. I do not respond to e-mail from Friday afternoon to Sunday evening.)

Course Description: 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 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. Recognize biodiversity in different ecological habitats and communities of organisms.
7. Communicate effectively about scientific ideas and topics.

Text: None required.

Course Webpage on learn.unm.edu (Blackboard): Course information including this syllabus and grades will be available via learn.unm.edu. I will also send out emails to the class periodically. Students should check email at least every couple of days.

Attendance Policy: Attendance will be taken each class as per UNM-Valencia policy. Students risk being dropped by the instructor if they have more than four absences. It is the student's responsibility to drop the course if the student no longer wishes to attend or is unable to

attend. Students are responsible for finding out what they missed in class. Class begins at 12:00 pm. At 12:05 students will be considered late. Students who are late or absent may receive a **zero** for any quiz or exam administered that day. **Do not be late for exams or quizzes. You cannot makeup exams. Exception to the above with respect to quizzes:** Contact me if you have a valid excuse (illness, death in the family, car accident, etc.) to arrange a make-up quiz, but you will need to provide evidence (doctor's note, etc.). Busy traffic is not an excuse. It is the prerogative of the instructor to decide what is a valid excuse.

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."

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.

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

Electronic Device Usage: Students may use laptops or tablets to take notes. However, students will not use these devices for checking e-mail, web surfing, or other non-class activities during class. Cell phones will be silenced during class. No calling, talking, or texting during class. If you have an emergency call, take it outside the classroom please.

Student Behavior: Students will comport themselves as adults in an academic setting. Please do not engage in private conversations or act in an otherwise disruptive manner during class, or you will be asked to leave. If you need to ask the person next to you a question, make it short, do it quickly and quietly. I expect students to extend this courtesy to each other as well.

No vaping or using tobacco products in class.

Lab Policies: No food or drink is allowed in the lab. Students are responsible for cleaning up their areas by the end of class. If students leave a mess, they will lose points from the lab.

Keep in mind this is a lab and you may be handling things you don't want on your skin. Long pants, closed shoes, and long sleeves are recommended.

Quizzes: Quizzes will be fill in the blank assignments that shouldn't take more than 15 minutes at the beginning of specific classes (see schedule below). The quizzes will cover material since the last quiz. Students should make sure to put their name on the quiz to receive credit. There will be 5 quizzes, and the lowest grade will be dropped. The quizzes are worth 25 points each.

Assignments: Assignments will be sets of questions based on the lab and will be turned-in in class the following Thursday. Make sure your name is on the assignment to receive credit. There are 12 assignments worth 10 points each.

Exams: There will be a midterm and a final exam. These exams will be practical exams. The students will answer questions at stations around the lab. Students will begin at specified stations with an answer sheet, they will have one minute to answer the question (fill in the blank), and then they will move together to their next station ("rotate"). After everyone has been to all the stations, the students will have the opportunity to go back to stations. There is no talking among students during practical exams. There will also be two essay questions after all students have finished with the stations.

Grading Breakdown:

Quizzes (4 best @ 25 points each)	100
Assignments (12 @ 10 points each)	120
Midterm Exam	100
Final Exam	100
Total points	420

Final grades will be awarded based on the percentage of points earned relative to total points.

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 100 points out of 420. 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 20 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 to 1500 words (about two to three pages). 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.

Testing Center: Use of the Testing Center will only be for those identified by Equal Access Services as requiring it, or for unusual circumstances as determined by me.

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

Week	Date	Exercise	Quizzes
1	22-Aug	Introduction, Scientific Method, Epidemiology	
2	29-Aug	Biological Molecules	
3	5-Sep	Microscopy and Cell Biology	Quiz 1
4	12-Sep	Diffusion and Osmosis	
5	19-Sep	Enzymes	Quiz 2
6	26-Sep	Photosynthesis	
7	3-Oct	Midterm Practical Exam	
8	10-Oct	Fall Break	
9	17-Oct	Cellular Respiration	
10	24-Oct	Mitosis	Quiz 3
11	31-Oct	Genetics I	
12	7-Nov	Genetics II	Quiz 4
13	14-Nov	Ecosystems	
14	21-Nov	Population Ecology	
15	28-Nov	Thanksgiving	Quiz 5
16	5-Dec	Final Practical Exam	

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