

Syllabus

Class: Tuesday 3:00 – 5:45 p.m.
Academics Building, Room 135

Instructor: Kirsten Cruz-McDonnell
Email: kcruzmc@unm.edu

Office Hours: Tuesday 1:30 – 2:30 p.m. in Academics Building, Room 113, or by appointment

Required Lab Manual: Thinking About Biology, An Introductory Lab Manual, 5th edition by Bress and Weisshaar. ****You will need to bring the lab manual to class each week.*

Course Description: This course is a laboratory that complements the concepts learned in the theory course. Students will learn skills involved in scientific measurement, microscopy, and mathematical analysis. Students will also perform experiments and data analysis related to cell structure and function, chemistry, enzyme activity, and genetics. *Credit is not applicable toward biology major or minor.* Pre or co-requisite: BIOL 123.

Student Learning Outcomes:

1. Explain the scientific method and use it to develop and test a hypothesis.
2. Analyze and interpret graphical data.
3. Demonstrate use of laboratory equipment to perform scientific measurements.
4. Demonstrate skills used in microscopy.
5. Distinguish between eukaryotic and prokaryotic cells, including their structures and functions.
6. Describe selective permeability of membranes and movement of water and molecules across membranes by diffusion and osmosis.
7. Describe the structure and function of enzymes.
8. Describe the structure of DNA and the flow of genetic material in a cell from DNA to RNA to proteins.
9. Describe the processes of mitosis and meiosis.
10. Predict the inheritance of genetic traits.

Laboratory Policies:

- No food or drink is allowed in the laboratory.
- Turn off cell phones during lab. **DO NOT TEXT MESSAGE DURING CLASS.** Any sight of a cell phone during exams or quizzes will result in an automatic fail for that assignment.
- Clean-up is the student's responsibility, including returning all equipment to its proper storage area and wiping down lab tables with disinfectant when needed. Lack of proper clean-up can result in loss of points associated with a lab.

- You are expected to come to lab ready to participate and learn.
- Disruptive or disrespectful behavior will not be tolerated and may result in loss of all points associated with that week's lab.

Grading Policy:

The course grade will be determined as follows:

Attendance	10%
Lab Assignments	30%
Quizzes (5 of 6)	20%
Midterm Exam	20%
Final Exam	20%

Grades earned will be based on percentage as follows:

97 or higher – A+	87-89.9 – B+	77-79.9 – C+	60-69.9 – D
93-96.9 – A	83-86.9 – B	73-76.9 – C	below 60 – F
90-92.9 – A-	80-82.9 – B-	70-72.9 – C-	

Attendance Policy: Attendance is required. Each absence will result in a 10% loss of your attendance grade. Students may be dropped from the class after 3 absences.

Lab Assignments: Lab assignments are designed to complement and enhance your understanding of the lecture material through practical application of the biological concepts. The lowest assignment score will be dropped for your final grade. Laboratory exercises cannot be made up under any circumstances.

Quizzes: Quizzes will be given to assess your comprehension of material covered in the previous weeks. The lowest quiz score will be dropped for your final grade. Quizzes are given during the first 5-10 minutes of the lab period. If you arrive late to lab, you will miss the quiz.

Exams: There will be 2 lab practical exams; a mid-term and a final.

Missed exam/quiz policy: Missed quizzes and exams cannot be made up! There are no make-up exams or quizzes allowed in this course.

No extra credit will be offered.

Withdrawal: If you drop the course after the drop deadline, you will receive a grade of 'W'.

Students with disabilities: If you have a documented disability, the Equal Access Services office will provide me with a letter outlining your accommodations. I will then discuss the accommodations with you to determine the best learning environment. If you feel that you need accommodations, but have not documented your disability, please contact Jeanne Lujan, the coordinator for Equal Access Services at 925-8910 or jmlujan@unm.edu.

Academic Integrity:

Having academic integrity is paramount to your success in any class. Plagiarism or cheating is not tolerated. Any instance of this will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy:

<https://policy.unm.edu/regents-policies/section-4/4-8.html>

The policy states:

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 who otherwise fails to meet the expected 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 is defined as:

"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 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>

Biology 124 laboratory schedule:

Date	Lab Exercise	Activities	Quiz
1) 08/21/18	Lab Intro / #1 Scientific Method	1, 2, 3, 4, 5, 6	
2) 08/28/18	#7 Organic Molecules	1, 2	
3) 09/04/18	#2 Microscopy #3 Cell Biology	1, 3, 4, 5, 6 1, 3, 4	Quiz #1
4) 09/11/18	Diffusion		
5) 09/18/18	Enzymes		Quiz #2
6) 09/25/18	#9 Molecular Genetics	1, 2, 3, 4, 5	
7) 10/02/18	#10 Mitosis #11 Meiosis	1, 2, 3, 4	Quiz #3
8) 10/09/18	Midterm Exam		
9) 10/16/18	Cellular Respiration		
10) 10/23/18	#11 Meiosis and Genetics #12 Human Genetics	1, 2, 6, 7 1, 2, 3, 5	Quiz #4
11) 10/30/18	#14 Tissues and Organs	1, 2, 3, 6, 7	
12) 11/06/18	#15 Cardiovascular System	1, 2, 3, 4	Quiz #5
13) 11/13/18	#16 Fetal Pig I	1, 2, 3, 4, 5, 6	
14) 11/20/18	<i>Off – Thanksgiving Holiday</i>		
15) 11/27/18	#17 Fetal Pig II	1, 2, 3, 4	Quiz #6
16) 12/04/18	Final Exam		