Biology 1110L Fall 2022 Syllabus



Course at a glance Biology for non-majors lab, section 502 Wednesdays, 1:30-4:15 Valencia Arts and Sciences room 135

Welcome to biology for non-majors! This course is an overview of biological principles and laboratory techniques important for non-majors to gain an understanding of science and the living world around them. *Credit is not applicable toward a biology major or minor.*

Course Learning Objectives:

1.) Students will employ critical thinking skills to judge the validity of information from a scientific perspective (Lab 1).

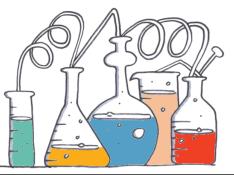
2.) Students will use the scientific method to formulate questions and develop testable hypotheses (Lab 1, 2, 4).

3.) Students will be able to use laboratory equipment to collect relevant, quality data (genetics lab, others).

4.) Students will recognize biodiversity in different ecological habitats and communities of organisms (Lab 7, 8, 9).

5.) Students will be able to communicate effectively about scientific topics and ideas (all).

6.) Students will be able to describe the importance, structure and replication of DNA in cells.





Instructor: Ben Flicker, Ph.D.

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Office phone: 505-925-8726

Drop in hours*: Mondays: 10:30-12:00 Tuesdays 1:30-3:00 Wednesdays: 10:30-12:00 Thursdays: 12:00-1:30 *And really, anytime my door is open outside of these times.

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Course Webpage:

We will be using the new Canvas platform this year, <u>canvas.unm.edu</u>. Our class will make some use of this, though there will not be any required information or assignments provided only there. You will be able to find documents like the lab activities and exam study guides in the 'files' tab. Grades will be posted here as well. Finally, the syllabus with schedule will be found here.

Textbook:

There is **No** lab manual for this class. The weekly lab activities will be provided for you by your instructor. Digital copies will also be made available on the course Canvas page.

Course Materials: You are required to bring a notebook of unlined paper to keep as a lab notebook. You will turn this in regularly for your participation points, so if you obtain one with perforated pages you can submit your work without submitting your entire notebook. I also



Hi all,

Welcome to biology 1110L! I am a molecular and evolutionary biologist, specializing in plant evolution and systematics. Currently, my research interests include systematics of Piñon pine in New Mexico as well as the microbial diversity in the Middle Rio Grande. When I am not working, I love music and running. I am excited to work with you all this fall!

Tips for Success in this Course:

-Actively and contientiously read and complete each lab exercise.
-Read over the appropriate lab exercises as well as your results to prepare for the quizzes and exams.
-Actively participate in your group.
Communicate with instructor in the case of absence.



COVID-19 Health and Awareness: UNM is a mask friendly, but not a mask required, community. To be registered or employed at UNM, Students, faculty, and staff must all meet UNM's Administrative Mandate on <u>Required COVID-19 vaccination</u>. If you are experiencing COVID-19 symptoms, please do not come to class. If you have a positive COVID-19 test, please stay home for five days and isolate yourself from others, per the **Centers** for Disease Control (CDC) guidelines. If you do need to stay home, please communicate with me via email (emailaddress@unm.edu) or Canvas course messaging; I can work with you to provide alternatives for course participation and completion. UNM faculty and staff know that these are challenging times. Please let us know that you need support so that we can connect you to the right resources and please be aware that UNM will publish information on websites and email about any changes to our public health status and community response

Course Graded Assignments:

Quizzes: 2 quizzes will be given throughout the term. These will be worth 25 points each. They will cover recent lab activities and be a mixture of practical and written elements.

Exams: 2 practical exams will be administered during the term. They will be a mixture of both practical and written questions. Exam study guides will be provided for both. The final will not be cumulative.

Class Participation: Actively participating with your group is essential to this course. As such, 96 of your points possible in the course will come from class participation. These points will be allotted based on: Regular attendance, being engaged in lab work, actively, and accurate completion of the lab activities.

Laboratory Policies:

- 1.) No food or drink is allowed in the lab at any time.
- 2.) No chewing gum in the lab.
- 3.) Absolutely no horseplay will be tolerated.

4.) Come on time and prepared for the lab activity and quiz for that day.

5.) Treat all lab equipment carefully and with respect

Title IX: Our classroom and our university should always be spaces of mutual respect, kindness, and support, without fear of discrimination, harassment, or violence. Should you ever need assistance or have concerns about incidents that violate this principle, please access the resources available to you on campus. Please note that, because UNM faculty, TAs, and Gas are considered "responsible employees" by the Department of Education, any disclosure of gender discrimination (including sexual harassment, sexual misconduct, and sexual violence) made to a faculty member, TA, or GA must be reported by that faculty member, TA, or GA to the university's Title IX coordinator. For more information on the campus policy regarding sexual misconduct, please see: <u>https://policy.unm.edu/university-</u> policies/2000/2740.html.



Course Grading Policy: Your grade in this class will be made up of the following:

96 points: Participation (12 lab exercises @ 8 points each)

50 points: Quizzes (2 quizzes @ 25 points each)

50 points: Midterm Practical Exam

50 points: Final Practical Exam

100%=A+, 92-99=A, 90-91=A-, 89=B+, 82-88=B, 80-81=B-, 79=C+, 72-78=C, 70-71=C-, 69=D+, 62-68=D, 60-61=D-, <60=F.

Date	Lab Exercise	Assessment
8/24/2022	Course Introduction/ Scientific Method	
8/31/2022	Photosynthesis & Data Collection	
9/07/2022	The Basic Plant Body	
9/14/2022	Plant Propagation	
9/21/2022	Plant Cells and Microscopy	
9/28/2022	Flowers	
10/05/2022	Fruits	
10/12/2022	Plant Secondary Compounds	Quiz 1
10/19/2022	Midterm Practical Exam	
10/26/2022	Land Plant Ecology	
11/02/2022	Land plant & Cactus Evolution	
11/09/2022	Genetics I	
11/16/2022	Genetics II	
11/23/2022	No Class: Thanksgiving	
11/30/2022	Makeup/Review Week	Quiz 2
12/06/2022	Final Practical Exam	