Biology 1140L Spring 2023 Syllabus



Course at a glance Biology for health-science majors, section 502 Tuesdays, 12:00-2:45 Valencia Arts and Sciences room 135

Welcome to biology for health-science majors! This course is an overview of biological principles and laboratory techniques important for health science majors and nonmajors. *Credit is not applicable toward a biology major or minor*

Course Learning Objectives:

1.) Students will display an understanding of the scientific method.

2.) Students will show the ability to analyze and interpret experimental data.

3.) Students will exhibit familiarity with basic cellular structure and anatomy.

4.) Students will demonstrate competency with basic microscopy.

5.) Students will be able to describe and identify the stages of the cell cycle/mitosis.

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





Instructor: Ben Flicker, Ph.D.

Office: HS 100B

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Office phone: 505-925-8726

Drop in hours*: Mondays: 10:30-12:00 Tuesdays 10:30-12:00 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>. This will most importantly serve as the site where you will download and be able to print, the upcoming week's lab activity. You will be able to find these documents in the 'files' tab of the course canvas page. Grades will be posted here as well as exam study guides. Finally, the syllabus with schedule will be found

Textbook:

There is no textbook for this class. We will use lab exercises that will be posted to the course canvas page each week. You are responsible for printing these documents and bringing them to class each week.

Attendance:

Due to the practical nature of the course, attendance is **mandatory**. Makeups will largely not be possible. Students may be dropped after 3 absences.



Hi all,

Welcome to biology 1140L! 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 spring!

Tips for Success in this Course:

-Print and read each lab exercise
before class to be prepared to
accurately complete the experiment.
-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 Required COVID-19 vaccination. 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 <u>Centers</u> 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: 5 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. The lowest quiz grade will be dropped.

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: https://policy.unm.edu/universitypolicies/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)

100 points: Quizzes (4 quizzes @ 25 points each)

100 points: Midterm Practical Exam

100 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	Lab Exercise
1/17/2023	Course Introduction/ Scientific Method and epidemiology	
1/24/2023	Data Collection and Graphing	
1/31/2023	Aseptic Method	Quiz 1
2/07/2023	Biological Molecules	
2/14/2023	Microscopy and Cell Biology	
2/21/2023	Diffusion and Osmosis	Quiz 2
2/28/2023	Enzymes	
3/07/2023	Midterm Practical Exam	
3/14/2023	Spring Break: No Class	
3/21/2023	Cellular Respiration I	
3/28/2023	Cellular Respiration II	
4/04/2023	Genetics I	Quiz 3
4/11/2023	Genetics II	
4/18/2023	Mitosis	Quiz 4
4/25/2023	Makeup/Review Week	Quiz 5
5/02/2023	Final Practical Exam	