Biology 1110: Biology for non-majors

UNM Valencia Campus

Semester: Fall

Year: 2021

CRN #: 64224 section 501. Mondays and Wednesdays, 9:00-10:15 in A140.

Credits: 3 credit hours

Course Description: this course is an overview of biological principles important for the non-major in today's world. Ecological, evolutionary, and molecular topics will be discussed. *Credit is not applicable toward a biology major or minor.*

Instructor: Dr. Ben Flicker

Contact Information: My office is H100B. My phone number on campus is 505-925-8726. My email address is benflicker@unm.edu. Email is the best way to contact me, aside from immediately before and after class and my office hours.

Student Drop-in Hours: Mondays 2:00-3:00, Tuesdays 10:30-12:00, 1:00-2:30, Wednesdays 3:00-4:00 or by appointment.

Course Book: Clark, M.A., J.C. Choi, & M. Douglas. <u>Biology 2e</u> (2020). Open Stax. Required. This is freely available as an ebook via the publisher website: openstax.org. You may also acquire a printed book for a charge, though that is optional.

Student Learning Objectives:

- 1.) Students will be able to explain the value of the scientific method as a means for understanding the natural world and for formulating testable predictions (Chapter 1).
- 2.) Students will be able to explain how chemical and physical properties apply to biological processes at the cellular level (Chapters 4,8,10,11)

- 3.) Students will demonstrate knowledge of basic concepts and mechanisms of cell biology (chapter 4).
- 4.) Students will demonstrate the understand that all organisms share properties of life as a consequence of their common ancestry (Chapter 25).
- 5.) Students will understand the fundamental processes of molecular biology (Chapter 3).
- 6.) Students will understand the mechanisms of evolution including natural selection, genetic drift and mutations (chapters 18 & 20).
- 7.) Students will understand the methods of inferring phylogenetic relationships and the basis for biological classification (chapters 18 & 25).
- 8.) Students will recognize the value of biological diversity, conservation of species, and the complexity of ecosystems (Chapter 44).

Course Webpage: Course materials will be posted on the course website (https://learn.unm.edu). This includes the syllabus, all assignments, grades, announcements, and links to email the instructor and other students in the course. You are responsible for all announcements that may be posted on the course page, so please check regularly. All homework assignment instructions, templates, and submissions, will be found on the course website.

Attendance: Students are responsible for getting information presented in any class missed. If you need to stay home for whatever reason, please do so. Zoom links will be available for all class periods, so if able, please attend that way to not miss out on class participation.

COVID-19 SYLLABUS LANGUAGE

<u>UNM Administrative Mandate on Required Vaccinations</u>

All students, staff, and instructors are required by <u>UNM Administrative Mandate</u> on <u>Required Vaccinations</u> to be fully vaccinated for COVID-19 as soon as possible, but no later than September 30, 2021, and must provide proof of vaccination or of a UNM validated limited exemption or exemption no later than September 30, 2021 to the <u>UNM vaccination verification site</u>. Students seeking medical exemption from the vaccination policy must submit a request to the <u>UNM verification site</u> for review by the UNM <u>Accessibility Resource Center</u>.

Students seeking religious exemption from the vaccination policy must submit a request for reasonable accommodation to the <u>UNM verification site</u> for review by the <u>Compliance, Ethics, and Equal Opportunity Office</u>. For further information on the requirement and on limited exemptions and exemptions, see the <u>UNM Administrative Mandate on Required Vaccinations</u>.

<u>UNM Requirement on Masking in Indoor Spaces</u>

All students, staff, and instructors are required to wear face masks in indoor classes, labs, studios and meetings on UNM campuses, see masking requirement. Vaccinated and unvaccinated instructors teaching in classrooms must wear a mask when entering and leaving the classroom and when moving around the room. Students who do not wear a mask indoors on UNM campuses can expect to be asked to leave the classroom and to be dropped from a class if failure to wear a mask occurs more than once in that class. With the exception of the limited cases described above, students and employees who do not wear a mask in classrooms and other indoor public spaces on UNM campuses are subject to disciplinary actions.

Communication on change in modality: The university may direct that classes move to remote delivery at any time to preserve the health and safety of the students, instructor and community. Please check your email and your UNM Learn site regularly for updates about our class, and please check https://bringbackthepack.unm.edu regularly for general UNM updates about COVID-19 and the health of our community.

Acceptable masks and mask wearing in class: A two-layer mask that covers the nose and mouth and that is cleaned regularly is acceptable, as are disposable medical masks, KN95, KF94, FFP1 and FFP2 masks. A face shield is not sufficient protection. It is vital that you wear your mask correctly, covering your nose and mouth. Removing your mask for an extended period to eat or drink in class violates the university mask requirement and endangers others.

Consequences of not wearing a mask properly: If you don't wear a mask, or if you do not wear a mask properly by covering your nose and mouth, you will be asked to leave class. If you fail to wear a mask properly on more than one occasion, you can expect to be dropped from the class. If you insist on remaining in the classroom while not wearing a mask, class will be dismissed

for the day to protect others and you will be dropped from the class immediately.

The instructor will try to have a few disposable masks available in the classroom on a first-come, first-served basis.

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

Title IX: 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

Students with disabilities: Qualified Students with disabilities should see me or the campus testing center as soon as possible so we can meet your needs suitably and quickly.

Quizzes: 90 of your 500 total points this semester will come from in-class quizzes. There will be 4 of these quizzes during the semester, each taking place on the class period before an exam. These quizzes will cover the same material as the following exam. They will be taken with your groups, with each group submitting one quiz. Each quiz will be worth 30 points, with your lowest quiz score being dropped.

Exams: 4 exams will be given. These will each be worth 75 points. Each exam will primarily cover material from the most recent unit of sections/chapters.

Class Participation: Class participation; both in whole-class discussions and group work are essential to this course. As such, 100 of your 500 points possible in the course will come from class participation. These points will be allotted based on: Regular attendance, being engaged in classwork, actively taking notes in class, and completion of group activities.

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

100 points: Class participation

300 points: Exams (4 exams @ 75 points each)

90 points: Quizzes (3 quizzes @ 30 points each)

10 points: Meet Ben Assignment

=500 total points possible

• 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.

Week	Subjects covered	Homework/ Quizzes
8/23/21	Course Introduction, Characteristics of Life	
8/25/21	Scientific Method	
8/30/21	Plant molecular biology- photosynthesis	
9/01/21	Plant molecular biology- growth	
9/06/21	Plant cells	
9/08/21	The plant body	
9/13/21	Exam Review	
9/15/21	Exam 1	
9/20/21	The Plant life cycle	
9/22/21	Mitosis	
9/27/21	Meiosis	
9/29/21	Flowers	
10/04/21	Seeds & Spores	
10/06/21	Fruits	

10/11/21	Exam 2 Review	
10/13/21	Exam 2	
10/18/21	Ecology and ecosystems	
10/20/21	Plants in their environments	
10/25/21	Plant modifications	
10/27/21	Land plant evolution part 1	
11/01/21	Land plant evolution part 2	
11/03/21	Land plant evolution part 3	
11/08/21	Exam 3 Review	
11/10/21	Exam 3	
11/15/21	Plant carbohydrates	
11/17/21	Plant proteins	
11/22/21	Plant propagation	
11/24/21	No Class: Thanksgiving	
11/29/21	Plant secondary compounds 1	
12/01/21	Plant secondary compounds 2	
12/06/21	Plant secondary growth	
12/08/21	Lecture Review	
12/15/2021	Exam 4 (not cumulative)	

^{*} Instructor reserves the right to alter course schedule as the semester progresses. Students will be given advance notice (at least 1 week) of any change in dates of homework assignments or exams.

Thank you for registering for Biology 110 at UNM-VC. I am very excited to be here to help you continue your education and achieve your goals.