Biology 2110c: Molecular and Cell Biology

UNM Valencia Campus

Semester: Fall

Year: 2020

CRN #: 66765 Section 501. Tuesdays & Thursdays 9:00-10:15 in A131.

Credits: 4 credit hours

Course Description: This class covers introductory concepts vital for science majors as well as relevant topics to molecular and cellular biology including; the scientific method, the role of water in cell biology, carbon and molecular diversity, macromolecules, introduction to metabolism, a tour of cell structures and functions, membrane structure and function, cellular respiration, photosynthesis, cell communication, and the cell cycle

Instructor: Dr. Ben Flicker

Contact Information: My office is HS 100B. My phone number on campus is 505-925-8726. My email address is benflicker@unm.edu. Email is the best way to contact me.

Student drop-in hours: I will be available to meet face-to-face on Tuesdays from 10:30-12:00 and Thursdays 12:00-1:30. Mondays and Wednesdays I will be only available to meet remotely over Zoom, Mondays from 10:30-12:00 and Wednesdays from 12:00-1:30. I will also be able to meet at those Tuesday and Thursday times over Zoom if you prefer. To set up a Zoom meeting with me during those times, go to the following link: https://calendly.com/benflicker/student-drop-in-hours

For a meeting outside those times, feel free to email me to set up an appointment.

Textbook: *Biological Science*, Scott Freeman, Kim Quillin, Lizabeth Allison, Michael Black, Greg Podgorski, Emily Taylor & Jeff Carmichael, 2017. 6th edition, Pearson Higher Education.

UNM Learn: Course materials will be posted on the course website (**https://learn.unm.edu**) This includes the syllabus, all assignments and announcements, as well as links to email the instructor and other students in the course.
You are responsible for all such communication on the learn course page, so please check regularly.

Student Learning Objectives:

1.) Students will display an understanding of the logic of scientific research (Chapter 1).

2.) Students will show comprehension of natural selection as the unifying theory of biology.

3.) Students will exhibit familiarity with basic biological chemistry including the importance of water and the principles of metabolic reactions and pathways.

4.) Students will demonstrate knowledge of cell structure including organelles, membranes, and cel-cell communication.

5.) Students will understand basic concepts of nuclear division by mitosis.

-The goal of this class is to help you become literate in these scientific concepts and be able to apply them in biology as you move forward.

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.

Respect the UNM Community by Preserving Health
You have the ability to prevent the spread of COVID-19 and to preserve the health of fellow students, your instructor, staff and the community by following UNM health protocols. The UNM Provost Administrative Directive on Mandatory Student Face Covering and Symptom Reporting
of July 9, 2020 requires that all students on UNM-Main and UNM branch campuses wear face masks in the face-to-face classroom and on campus unless they have a specific mask accommodation (confidentially documented with the Accessibility Resource Center). UNM Provost Administrative Directive is

consistent with Governor Lujan Grisham's Public Health Emergency Order, as amended, and the Public Health Order of the New Mexico Health Secretary. It also requires daily participation in symptom screening through covidscreen, which will be sent via UNM e-mail.
Acceptable masks and mask wearing in class: A two-layer mask that covers the nose and mouth and that is cleaned regularly is acceptable. 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 Provost Administrative Directive and endangers others. Mask Wearing Accommodation: Individuals with a documented disability or diagnosis may seek accommodation with the UNM Accessibility Resource Center (ARC) (arc.unm.edu). Individuals do not need to reveal private information to an instructor. ARC will require documentation of health requirements, which will be kept confidential. The instructor will be informed only of any need for accommodation. Consequences of not wearing a mask properly: Unless you have an ARC-approved accommodation, 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 occasions, you can expect to be dropped from the class. If you insist on remaining in the classroom while not wearing a mask (without an ARC-determined accommodation), class will be dismissed for the day to protect others and you will be dropped from the class immediately.

Mental Health: We are in an unprecedented time. We are dealing with changes to all facets of our life from the way we work, learn, and communicate. These changes can become stressful to the point of overwhelming. If these stresses catch up with you, and you need a day or four, to catch your breath in any way, just let me know. No assignment is worth overwhelming yourself. If you need an extension on anything, just let me know. Most due dates (with the exception of the final exam) are flexible. In response to this situation, UNM has made the resources at the Student Health and Counseling available for all students. For more information on this, go to: shac.unm.edu

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.

Homework: Weekly homework assignments will be given. These will serve as chapter summaries to prepare you for each chapter's quiz and exam.

Exams: 4 exams will be given. The first 3 will be worth 100 points each. The final exam will be cumulative, comprised of new material covered since the third midterm as well as all previous material. The final exam will be worth 150 points.

Quizzes: 9 quizzes will be given during the semester. Quizzes will be given The class period following the completion if a chapter. Each quiz will be worth 10 points.

Class Participation: Class participation; both in whole-class discussions and group work are essential to this course. As such, 110 of your 900 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.

Extra Credit: As part of the Student Experience Project, you will be asked to take five short surveys at various points in the semester. These surveys will take less than 10 minutes each and the results will be used to improve your experience as students at the University of New Mexico and my abilities as an instructor. The answers you give to the survey will be anonymous, I will simply see whether you completed the survey, in order to give you extra credit points.

After the surveys are complete I will see the averages of the survey responses. I value and appreciate your honest feedback

Course Grading Policy: Lecture grades will be based on the percentage of points earned (100% or higher = A+, 99-91% = A, 90% = A-. 88-89% = B+, 87-81% = B, 80% = B-, 79-78% = C+, 77-71% = C, 70% = C-, 69-68% = D+, 67-61% = D, 60% = D-, < 60% = F.

- 100 points: Homework assignments (10 assignments @ 10 points each)
- 110 points: In class activities/class participation
- 90 points: Quizzes (9 quizzes @ 10 points each)
- 300 points: Exams (3 exams @ 100 points each)
- 150 points: Cumulative final exam
- 150 points: Lab Activities & Participation
- = 900 Total points

Week	Subjects covered	Homework/ Quizzes
8/18/20	Course Introduction/Chapter 1	Hwk 1
8/20/20	Chapter 2: Chemical Bonds & Reactions	
8/25/20	Chapter 2: Chemical bonds & Reactions	Hwk 2
8/27/20	Chapter 2: The chemistry of water	
9/01/20	Chapter 3: Proteins	
9/03/20	Chapter 3: Proteins	
9/08/20	Chapter 3: Proteins	Hwk 3
9/10/20	Exam Review	
9/15/20	Exam 1 (Chapters 1-3)	
9/17/20	Chapter 4: Nucleic Acids	

9/22/20	Chapter 4: Nucleic Acids	Hwk 4
9/24/20	Chapter 5: Carbohydrates	
9/29/20	Chapter 5: Carbohydrates	Hwk 5
10/1/20	Chapter 6: Lipids	
10/06/20	Chapter 6: Lipids	
10/08/20	Exam Review	
10/13/20	Exam 2: Chapters 4-6	Hwk 6
10/15/20	Chapter 7: Cell Structure	
10/20/20	Chapter 7: Cell Structure	
10/22/20	Chapter 8: Energy and Enzymes	
10/27/20	Chapter 8: Energy and Enzymes	Hwk 7
10/29/20	Chapter 9: Cellular Respiration	
11/03/20	**Election Day: No Class**	Hwk 8
11/05/20	Chapter 9: Cellular Respiration	
11/10/20	Lecture Review	Hwk 9
11/12/20	Exam 3: Chapters 7-9	
11/17/20	Chapter 10: Photosynthesis	
11/19/20	Chapter 10: Photosynthesis	
11/24/20	Chapter 10: Photosynthesis	Hwk 10
11/26/20	**No Class: Thanksgiving**	
12/01/20	Lecture Review: Online Class	
12/03/20	Final Exam Available	
12/10/19	**Cumulative Final Exam Due**	

***** 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 quizzes, homework assignments, or midterm exams.

Thank you for registering for Biology 201L at UNM-VC. I am very excited to be here to help you continue your education and achieve your goals.