



UNM Valencia Campus

Semester: Fall

Year: 2017

CRN #: 22803 Section 501. Tuesdays & Thursdays 9:00-10:15 in AS 133.

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 AS 132. My phone number on campus is 505-925-8726. My email address is benflicker@unm.edu. Email is the best way to contact me.

Office hours: Mondays 10:30-12:00 & 1:00-2:30; Tuesdays 10:30-12:00, Wednesdays 11:00-12:00 & 1:00-2:30, or by appointment.

Textbook: *Biological Science*, Scott Freeman, Kim Quillin, Lizabeth Allison, Michael Black, Greg Podgorski, Emily Taylor & Jeff Carmichael, 2017. 6th edition, Pearson Higher Education. Access to the "mastering biology" website for the textbook is required for the course. It can be purchased on its own (including access to the electronic book) at the website masteringbiology.com. Once you create an account you will need the class code to register for the section. The code is: MBFLICKER90103

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 cell-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: Attendance is Required for all classes. Students are responsible for getting information presented in any class missed. Students may be dropped from the class after 4 absences. Attendance will be taken via a daily sign-in sheet. Excessive tardiness (greater than 10 minutes) will be counted as an absence. Quizzes and Exams will begin promptly at the beginning of the period. **Arriving late for a quiz or exam could result in a score of zero.**

Learning Center: The learning center is a useful resource for students and faculty located in the building with the library (LRC 108). Some regular office hours (Mondays & Wednesdays 1:00-2:30) will be kept there and provide a space to work together with classmates and the instructor outside of class periods.

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>

Missed exam/quiz policy: Only official documentation of a medical or family emergency will excuse a missed exam or quiz. In such an instance please contact me as soon as possible to arrange a potential make-up. Un-excused absences on an exam/ quiz date will result in a grade of zero for the assessment.

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.

Learning Objectives: For each chapter/ topic covered, you will be provided with a list of learning objectives. This list will include the relevant vocabulary terms and concepts that will be covered in that chapter and that you will be responsible for on quizzes and exams.

Mastering Biology Activities: Through the course mastering biology webpage you will be responsible to complete activities for each chapter by the due date. These are designed to help you target your studying to areas where you are in need of work so that you can

BIOL 201: Molecular and Cellular Biology

be more effective and efficient in your studying. These activities will be a part of your grade and are required for you to pass the course.

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 exam as well as all previous material. The final exam will be worth 150 points.

Quizzes: 4 quizzes will be given during the semester. These will be given in class in the week before the upcoming exam. They will be designed as exam prep, to prepare you for the types of questions on the forthcoming exams. These are worth 25 points each.

Study Aids: Studying the sciences is, in some ways, similar to learning a foreign language. There are a lot of vocabulary terms that are critical to learn in order to understand the concepts of the course. To aid in that I highly recommend making flash cards of the relevant vocabulary terms given out by the instructor. A course web page of these critical vocabulary terms has been set up on the studyblue (studyblue.com) server for use on computers and smartphones.

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.

- 30 points: Attendance (30 meetings @ 1 point each)
- 165 points: Mastering Biology activities (11 assignments @ 15 points each)
- 100 points: In class activities/class participation
- 100 points: Quizzes (4 assignments @ 25 points each)
- 300 points: Exams (3 exams @ 100 points each)
- 150 points: Cumulative final exam
- 300 points: Lab Activities & Participation
- 5 points: Free!
- = 1150 Total points

Week	Subjects covered	Homework/ Quizzes
8/22/17	Course Introduction	
8/24/17	Chapter 1: Biology and the Tree of Life	
8/29/17	Chapter 2: Chemical bonds & Reactions	MB 1
8/31/17	Chapter 2: The chemistry of water	

9/05/17	Chapter 2: Chemical evolution & Organics	MB 2
9/07/17	Chapter 3: Proteins	
9/12/17	Chapter 3: Proteins	
9/14/17	Chapter 3: Proteins	MB 3
9/19/17	Exam review	Quiz 1
9/21/17	Exam 1 (Chapters 1-3)	
9/26/17	Chapter 4: Nucleic Acids	
9/28/17	Chapter 4: Nucleic Acids	MB 4
10/03/17	Chapter 5: Carbohydrates	
10/05/17	Chapter 5: Carbohydrates	MB 5
10/10/17	Chapter 6: Lipids	
10/12/17	No Class: Fall Break	
10/17/17	Chapter 6: Lipids	MB 6
10/19/17	Lecture Review	Quiz 2
10/24/17	Exam 2 (Chapters 4-6)	
10/26/17	Chapter 7: Cell Structure	
10/31/17	Chapter 7: Cell Function	MB 7
11/02/17	Chapter 8: Energy and Enzymes	
11/07/17	Chapter 8: Energy and Enzymes	MB 8
11/09/17	Chapter 9: Cellular Respiration	MB 9
11/14/17	Chapter 9: Fermentation	Quiz 3
11/16/17	Exam 3 (Chapters 7-9)	

11/21/17	Chapter 10: Photosynthesis	
11/23/17	No Class: Thanksgiving Holiday	
11/28/17	Chapter 10: Photosynthesis II	MB 10
11/30/17	Chapter 11: Cell to Cell Interactions	
12/05/17	Chapter 11: Cell to Cell Interactions	MB 11
12/07/17	Lecture Review	Quiz 4
12/12/16	Cumulative Final Exam (9:00-11:00)	

* 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.