UNM Valencia Campus

Semester: Fall

Year: 2019

CRN #: 66765 Section 501. Tuesdays & Thursdays 9:00-10:15 in A140.

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 isAS 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 9:00-10:00; Tuesdays 10:30-12:00 & 1:00-3:30; Wednesdays 1:00-3:00; Thursdays 8:00-9:00, 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.

UNM Learn: Course materials will be posted on the course website (<u>https://</u><u>learn.unm.edu</u>) 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: 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.

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 - <u>http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf</u>). 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 (<u>Oeo.unm.edu</u>) For more information on the campus policy regarding sexual misconduct, see: <u>https://policy.unm.edu/university-policies/2000/2740.html</u>

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.

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: ____ quizzes will be given during the semester._____

Class Participation: Class participation; both in whole-class discussions and group work are essential to this course. As such, 100 of your 960 points possible in the course will come from class participation. These points will be allotted based on:

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.

- 110 points: Homework assignments (11 assignments @ 10 points each)
- 100 points: In class activities/class participation
- 100 points: Quizzes
- 300 points: Exams (3 exams @ 100 points each)
- 150 points: Cumulative final exam
- 200 points: Lab Activities & Participation
- = 1000 Total points

| Week | Subjects covered | Homework/ Quizzes |
|---------|---------------------------------------|----------------------|
| 8/20/19 | Course Introduction/Chapter 1 | Hwk 1 |
| 8/22/19 | Chapter 2: Chemical Bonds & Reactions | |
| 8/27/19 | Chapter 2: Chemical bonds & Reactions | |
| 8/29/19 | Chapter 2: The chemistry of water | Hwk 2 |
| 9/03/19 | Chapter 3: Proteins | |
| 9/05/19 | Chapter 3: Proteins | |
| 9/10/19 | Chapter 3: Proteins | Hwk 3 |
| 9/12/19 | Exam Review | |
| 9/17/19 | Exam 1 (Chapters 1-3) | |
| 9/19/19 | Chapter 4: Nucleic Acids | |
| 9/24/19 | Chapter 4: Nucleic Acids | Hwk 4 |
| 9/26/19 | Chapter 5: Carbohydrates | |

| 12/10/19 | Cumulative Final Exam (9:00-11:00) | |
|----------|---------------------------------------|--------|
| 12/05/19 | | |
| | Lecture Review | |
| 12/03/19 | Chapter 11: Cell to Cell Interactions | Hwk 11 |
| 11/28/19 | Chapter 10: Photosynthesis | Hwk 10 |
| 11/26/19 | Chapter 10: Photosynthesis | |
| 11/21/19 | No Class: Thanksgiving Holiday | |
| 11/19/19 | Exam 3 (Chapters 7-9) | |
| 11/14/19 | Lecture Review | |
| 11/12/19 | Chapter 9: Fermentation | Hwk 9 |
| 11/07/19 | Chapter 9: Cellular Respiration | |
| 11/05/19 | Chapter 8: Energy and Enzymes | Hwk 8 |
| 10/31/19 | Chapter 8: Energy and Enzymes | |
| 10/29/19 | Chapter 7: Cell Function | Hwk 7 |
| 10/24/19 | Chapter 7: Cell Structure | |
| 10/22/19 | Exam 2 (Chapters 4-6) | |
| 10/17/19 | Lecture Review | |
| 10/15/19 | Chapter 6: Lipids | Hwk 6 |
| 10/10/19 | Fall Break: No Class | |
| 10/08/19 | Chapter 6: Lipids | |
| 10/03/19 | Chapter 5: Carbohydrates | Hwk 5 |
| 10/01/19 | Chapter 5: Carbohydrates | |

* 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.