



UNM Valencia Campus

Semester: Spring

Year: 2019

CRN #: 35756 Section 501. Tuesdays & Thursdays 9:00-10:15 in AS 133.

Credits: 4 credit hours

Course Description: This class covers introductory concepts vital for biology majors including; meiosis and sexual reproduction, Mendelian genetics, DNA and gene structure and function, genomics, and gene expression.

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 8:30-10:00, Tuesdays 10:30-1:00, Wednesdays 8:30-10:00, Thursdays 12:00-1:30, 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.

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 processes and outcomes of nuclear division by mitosis and meiosis (Ch. 12 & 13)
 - 2.) Students will show comprehension of patterns of inheritance by Mendel's laws, Punnet square analysis, gene linkage, and sex-linked inheritance (Chapter 14).
 - 3.) Students will exhibit familiarity with basic structure of DNA and how the information of genes is expressed and controlled in the cell (Chapters 15-19).
 - 4.) Students will demonstrate knowledge of genetic engineering and genomics.
 - 5.) Students will understand basic concepts of development.
- 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. 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. Some regular office hours (Wednesday 8:30-10:00) 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>

Citizenship and/or Immigration Status: All students are welcome in this class regardless of citizenship, residency, or immigration status. Your professor will respect your privacy if you choose to disclose your status. As for all students in the class, family emergency-related absences are normally excused with reasonable notice to the professor, as noted in the attendance guidelines above. UNM as an institution has made a core commitment to the success of all our students, including members of our undocumented community. The Administration's welcome is found on our website: <http://undocumented.unm.edu/>.

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.

Problem sets: Weekly problem sets will be given out to reinforce class topics and to prepare you for in-class quizzes and exams.

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: ~11 quizzes will be given during the semester. There will be one after each chapter we complete. They will be designed as exam prep, to prepare you for the types of questions on the forthcoming exams. These are worth 10 points each with the lowest quiz score dropped.

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.

- 120 points: Chapter problem sets (12 assignments @ 10 points each)
- 80 points: In class activities/class participation/Attendance
- 100 points: Quizzes (10 assignments @ 10 points each)
- 300 points: Exams (3 exams @ 100 points each)
- 150 points: Cumulative final exam
- 250 points: Lab Activities & Participation
- = 900 Total points

| Week | Subjects covered | Homework/ Quizzes |
|---------|---|----------------------|
| 1/15/19 | Course Introduction & Chapter 11 part 1 | |
| 1/17/19 | Chapter 11: Cell-Cell Interactions part 2 | Ch. 11 problems |
| 1/22/19 | Chapter 12: Mitosis pt. 1 | Ch. 11 Quiz |
| 1/24/19 | Chapter 12: Mitosis pt. 2 | Ch. 12 problems |

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| 1/29/19 | Chapter 13: Meiosis pt. 1 | Ch. 12 Quiz |
| 1/31/19 | Chapter 13: Meiosis pt. 2 | Ch. 13 problems |
| 2/05/19 | Exam Review | Ch. 13 Quiz |
| 2/07/19 | Exam 1: Chapters 11-13 | Exam 1 |
| 2/12/19 | Chapter 14: Mendel part 1 | |
| 2/14/19 | Chapter 14: Mendel part 2 | Ch. 14 problems |
| 2/19/19 | Chapter 15: DNA and the gene part 1 | Ch. 14 Quiz |
| 2/21/19 | Chapter 15: DNA and the gene part 2 | Ch. 15 problems |
| 2/26/19 | Chapter 16: How genes work part 1 | Ch. 15 Quiz |
| 3/28/19 | Chapter 16: How genes work part 2 | Ch. 16 problems |
| 3/05/19 | Exam Review | Ch. 16 Quiz |
| 3/07/19 | Exam 2 (Chapters 14-16) | |
| 3/12/19 | Spring Break: No Class | |
| 3/14/19 | Spring Break! | |
| 3/19/19 | Chapter 17: Transcription and Translation p. 1 | |
| 3/21/19 | Chapter 17: Transcription and Translation p. 2 | Ch. 17 problems |
| 3/26/19 | Chapter 18: part 1 | Ch. 17 Quiz |
| 3/28/19 | Chapter 18: part 2 | Ch. 18 problems |

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| 4/02/19 | Chapter 19 part 1 | Ch. 18 Quiz |
| 4/04/19 | Chapter 19 part 2 | Ch. 19 problems |
| 4/09/19 | Lecture Review | Ch. 19 Quiz |
| 4/11/19 | Exam 3 (Chapters 17-19) | |
| 4/16/19 | Chapter 20: Biotechnology part 1 | Ch. 20 problems |
| 4/18/19 | Chapter 20: Biotechnology part 2 | |
| 4/23/19 | Chapter 21: Genes, development and evolution | Ch. 20 Quiz |
| 4/25/19 | Chapter 21: Genes, development and evolution | Ch. 21 problems |
| 4/30/19 | Wild Card | Ch. 21 Quiz |
| 5/02/19 | Lecture Review | |
| 5/9/19 | Cumulative Final Exam (9:00-11:00) | |

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

Thank you for registering for Biology 202L at UNM-VC. I am very excited to be here to help you continue your education and achieve your goals.