Biology 123: Biology for Health-Related Sciences/ Non-Majors

UNM Valencia Campus

Semester: Spring

Year: 2018

CRN #: 33647 Section 501. Mondays & Wednesdays 9:00-10:15 in AS 133.

Credits: 3 credit hours

Course Description: This course is an overview of biological principles important for the health sciences majors and non-major in today's world. Principles of biochemistry, cell biology, genetics, and organismic biology are addressed. *Credit is not applicable toward a biology major or minor.*

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 & 1:00-3:00; Tuesdays 10:30-12:00 & 3:00-4:00 Thursdays 3:00-4:00; or by appointment.

Textbook: *Inquiry into Life*, Sylvia S. Mader & Michael Windelspecht, 2017. 15th edition, McGraw Hill. Our class will use a special edition of this book available at the bookstore: *Biology for Health-Related Sciences or Non-Majors Course*, Biology 123, University of New Mexico Valencia Campus, ISBN-9781307044010.

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.

2.) Students will show comprehension of the chemistry of life including: atomic structure and bonding, movement of molecules, the importance of water in cells, important biological molecules, and metabolic pathways and reactions.

3.) Students will exhibit familiarity with the structure, function and replication of cells and DNA.

4.) Students will demonstrate knowledge of basic concepts and mechanisms of human genetics and inheritance.

5.) Students will understand basic concepts of human physiology including tissue, organ and organ system structure and functions.

-The goal of this class is to help you become literate in these scientific concepts and be able to apply them in your life 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 has tutors ready to help Biology 123 students. Call the learning center at 925-8907 for available hours. They prefer to make appointments, but if they are not busy you may be able to drop in and find an available tutor. Appointments typically last one hour. Their website is http://valencia.unm.edu/campus-resources/the-learning-center/index.html

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

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.

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 Titel 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**

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.

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.

Homework: Homework assignments will be given in class daily. They will be a combination of reinforcement of in-class learning objectives as well as reading assignments for introducing new material. They will be due the class period immediately after they are assigned. If you miss a class period, you will be responsible for obtaining that day's homework assignment (either from learn or from contacting me) and submitting on the due date.

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)
- 70 points: In class activities/class participation
- 200 points: Homework assignments
- 300 points: Exams (3 exams @ 100 points each)
- 150 points: Cumulative final exam
- = 700 Total points

Week	Subjects covered
1/15/18	No Class
1/17/18	Course Overview & Chapter 2: Basic Chemistry
1/22/18	Chapter 2: The Molecules of Life
1/24/18	Chapter 2: Organic Chemistry
1/29/18	Chapter 3: Cell Biology
1/31/18	Chapter 3: Cell Structure
2/05/18	Chapter 4: Cell Membranes
2/07/18	Lecture Review

2/12/18	**Exam 1** (**Chapters 1-4**)
2/14/18	Chapter 5: Energy and Enzymes
2/19/18	Chapter 6: DNA Structure and Function
2/21/18	Chapter 6: Gene Expression
2/26/18	Chapter 7: Cell Cycle
2/28/18	Chapter 7: Cell Division
3/05/18	Lecture Review
3/07/18	**Exam 2** (**Chapters 5-7**)
3/12/18	Spring Break: No Class
3/14/18	Spring Break: No Class
3/19/18	Chapter 8: Cellular Respiration part 1
3/21/18	Chapter 8: Cellular Respiration part 2
3/26/13	Chapter 9: Genetic Inheritance part 1
3/28/18	Chapter 9: Genetic Inheritance part 2
4/02/18	Chapter 10: Chromosomal Inheritance part 1
4/04/18	Chapter 10: Chromosomal Inheritance part 2
4/09/18	Lecture Review
4/12/18	**Exam 3** (**Chapters 8-10**)
4/16/18	Chapter 12: The Cardiovascular System part 1
4/18/18	**Thanksgiving Holiday: No Class**
4/23/18	Chapter 12: The Cardiovascular System part 2
4/25/18	Chapter 13: The Digestive System
4/30/18	Chapter 13: Digestion and Nutrition
5/02/18	Lecture Review

5/7/18	**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 123 at UNM-VC. I am very excited to be here to help you continue your education and achieve your goals.