Biology for Non-Majors ONLINE
Biology 110-502
Fall 2017
Syllabus

Instructor: Dr. Miriam J. Chávez

Office: Room 100B, Health Science Building

Office Hours: Monday – Thursday 8:00 - 9:00 a.m.
Monday & Tuesday 10:30 to Noon

Phone: 925-8613

E-mail: mjchavez@unm.edu

Course Description:

Introductory biology class covering cell biology, genetics, ecological and evolutionary topics. Credit not allowed for both Biology 123 and 110. Credit is not applicable toward biology major or minor.

Student Course Learning Objectives:

The course is divided into 5 modules and at the completion of this course, student will be able to:

1. Introduction to biology
    a. Explain the nature and process of science
    b. Analyze data, construct and interpret graphs
    c. Critically evaluate scientific information and develop a testable hypothesis to explain phenomena of the natural world
2. Chemistry
    a. Describe the atomic structure of an atom
    b. Identify macromolecules of life and explain how their structures relate to their functions in cells
3. Cells
    a. Describe how cellular structures and functions are related
    b. Explain energy transformation pathways in autotrophs and heterotrophs
4. Genetics
    a. Describe the DNA structure
    b. Explain the basic mechanisms of inheritance from the molecular to organismal level

5. Ecology and evolution
    a. Define biological evolution by natural selection and explain microevolution and macroevolution
    b. Explain the basic principles of ecology and population, community and ecosystem levels

The overall goal of the course is to help you become literate in these scientific concepts and be able to apply them in your life as you move forward in reaching your educational goal.

Required Learning Resources:

1. Text: Biology: Essentials by Hoefnagel, 2nd edition, 2016, McGraw Hill Publisher. The bookstore has a short version of the book - Biology for Non-Majors Biology 110, University of New Mexico Valencia Campus, ISBN-13 9781307044034.

2. Course Webpage: **https://learn.unm.edu/** . The webpage contains resources you need to succeed in the course. Login using your UNM user name and password. ***You are responsible for all announcements, assignments, quizzes, tests and/or any changes to the syllabus will be posted on the webpage.***

Course Policies:

1. **Assignments.** There are nine assignments that must be turned in by Sunday at 11:59 p.m.; you will have about two weeks to work on the assignment. These assignments must be turned in through Learn and are based on the readings. You are allowed to get help from a tutor or work with another student. I also encourage you to contact me if you have any questions, but do not wait until the last minute. ***The assignment has to be written in your own words.***
2. **Review packets.** There will be three review packets assigned before each exam. These assignments will help you review and apply the material that you have learned.
3. **Late assignments.** Late assignments will only be accepted within the first week following the due date. There will be a 50% reduction in grade. I will not accept assignments after the first week.
4. **Quizzes.** Quizzes will be timed and you will be allowed to take each quiz twice if needed. You will also be allowed to drop one quiz. All quizzes are to be taken by Thursday by 11:59 p.m. Quizzes will be available on Wednesday morning.
5. **Exams.** You will have a limited time to take each exam and only allowed to take it once. Prepare yourself and give yourself plenty of time before starting the exam. All exams are to be taken on Thursday by 11:59 p.m. The exams will be available on Tuesday morning.
6. **Withdrawal.** If a student drops the course before September 8, it will not appear on their transcript. After September 8 a "W" will be issued.

7. **Drop policy.** If the student has missed three assignments/quizzes, he/she will be dropped from the class. Also, if a student has not logged in to Learn in two weeks he/she will be dropped.
8. **Study habits.** To be an effective professional, information must be learned and retained efficiently. Studies have shown that information which is "experienced" a number of times within a short period of time frequently goes into long-term memory. Be an active student.
    - Look and read the chapter outline after reading the outline for each week.
    - Read the chapter. It will take you **more than one** reading to understand the material presented.
    - Learn the vocabulary.
    - Look at the PowerPoint slides.
    - Keep up with the assignments.
    - Give yourself plenty of time to study for a quiz or exam.

Special Needs:

Qualified students with disabilities needing appropriate academic adjustments should contact the instructor by the end of the 1st week of the semester to ensure that your needs are met in a timely manner.

Academic Dishonesty:

Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, up to and including dismissal, against any student who is found guilty of academic dishonesty or otherwise fails to meet the standards. Any student judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests, or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; misrepresenting academic or professional qualifications within or without the University; and nondisclosure or misrepresentation in filling out applications or other University records.

Equal Opportunity and Non-discrimination:

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 page 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.

Grading Criteria for Assigning Final Course Grade:

Assignments (9)	90 points
Reviews (3)	75 points
Quizzes (4 out of 5)	100 points
Exams (3)	300 points
Final Exam	125 points

The student's total points will be divided by the total possible points (690) and the grade earned will be based on the following percentage:

100 or higher – A+	77-79 – C+
94-99 – A	73-76 – C
90-93 – A-	70-72 – C-
87-89 – B+	60-69 – D
83-86 – B	below 60 – F
80-82 – B-	

If a student fails to log into Blackboard Learn by the end of the second week in the semester, the student will be dropped from the class.

Course Outline

Week	Week of	Chapter - Topic
1	August 21	MODULE 1 – INTRO TO BIOLOGY Scientific Study of Life (Ch. 1)
		Assignment 1 Due
2	August 28	MODULE 2 – CHEMISTRY Chemistry (Ch. 2)
		Assignment 2 Due **Quiz 1**
3	September 4	MODULE 3 – CELLS Cells (Ch. 3)
		Assignment 3 Due
4	September 11	Cells (Ch. 3)
		Assignment 4 Due **Quiz 2**
5	September 18	Review #1
		Exam 1 (Chapters 1-3)
6	September 25	Energy of Life (Ch. 4) Cell Respiration (Ch. 5) Photosynthesis (Ch. 6)
		Assignment 5 Due **Quiz 3**
7	October 2	MODULE 4 – GENETICS DNA Structure & Function (Ch. 7)
8	October 9	DNA Replication & Mitosis (Ch. 8)
		Exam 2 (Chapters 4-7)
9	October 16	Meiosis (Ch. 9)
		Assignment 6 Due
10	October 23	Patterns of Inheritance – part I (Ch. 10)
		Quiz 4
11	October 30	Patterns of Inheritance – part II (Ch. 10)
		Assignment 7 Due
12	November 6	Review #2
		Exam 3 (Chapters 8-10)

13	November 13	MODULE 5 – ECOLOGY & EVOLUTION Forces of Evolutionary Change (Ch. 11) Evidence of Evolution (Ch. 12)
		Assignment 8 Due
14	November 20	Diversity of Plants (Ch. 13) Diversity of Animals (Ch. 14)
		Quiz 5
15	November 21	Review #3
		Assignment 9 Due
16	December 4	Populations (Ch. 15) Communities & Ecosystems (Ch. 16)
	Wednesday, December 13	**Final Exam**

** I reserve the right to make necessary changes throughout the course.