Biology for Non-Majors ONLINE Biology 110-502 Spring 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 – Noon

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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

Required Learning Resources:

1. Text: <u>Biology: Essentials</u> by Hoefnagel, 2nd edition, 2016, McGraw Hill Publisher (ISBN 978-1-259-29498-3). When you purchase the access code you will have access to the e-book.

http://connect.mheducation.com/class/m-chavez-unm---valencia---biology-110---spring-2017

- 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. I strongly urge you to check each week for assignments and due dates.
- 3. McGraw Hill Connect Website: This is a very important website –

http://connect.mheducation.com/class/m-chavez-unm---valencia---biology-110---spring-2017

- You have access to the eBook You can read the information for each chapter assigned, you can watch videos and have access to all the figures.
- Assignment List Two types
 - o LS Chapters When you click here you will be asked questions to see if you understand the material based on the reading. There is no time limit and you can attempt this as often as you would like. You can use this tool to help you prepare for doing the homework, or practice before taking quizzes and exams.
 - LS Homework You <u>must</u> do these by the date indicated to get full credit. The grade earned will be part of your grade. You have TWO attempts for each homework. Each homework is worth 10 points.

Course Policies:

- 1. Assignments. There are seven 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. LS Homework. These are to be completed at the Connect website. You will have two attempts for each homework assignment and is a way to test yourself to make sure you have mastered the topics covered.
- **3.** Case Studies. There will be three case studies assigned throughout the semester. These assignments will help you apply the material that you have learned.

- **4.** Late assignment/homework/case studies. 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.
- **5. 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.
- **6. 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.
- **7. Withdrawal.** If a student drops the course before February 3, it will not appear on their transcript. After February 3 a "W" will be issued.
- **8. 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.
- **9. 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 (8)	80 points
Case studies (3)	75 points
Quizzes (4 out of 5)	100 points
Exams (3)	300 points
Final Exam	110 points
Connect LS Homework (11)	110 points
Note this homework mus	t he completed at the l

--- Note this homework must be completed at the McGraw Hill Connect website

The student's total points will be divided by the total possible points (775) 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 or does not get access code to the Connect Website 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	January 16	Scientific Study of Life (Ch. 1)
		Assignment 1 Due
2	January 23	Chemistry (Ch. 2)
	•	Assignment 2 Due
		Quiz 1
3	January 30	Cells (Ch. 3)
4	February 6	Cells (Ch. 3)
		Assignment 3 Due
		Quiz 2
5	February 13	Case Study #1
		Exam 1
6	February 20	Energy (Ch. 4, 5, 6)
	·	Assignment 4 Due
		Quiz 3
7	February 27	Genetics (Ch. 7)
8	March 6	Genetics (Ch. 8)
		Assignment 5 Due Exam 2
9	March 13	Spring Break – No Classes
10	March 20	Genetics (Chs. 9 & 10)
		Quiz 4
11	March 27	Genetics (Ch. 10)
		Assignment 6 Due
12	April 3	Case Study #2
		Exam 3
13	April 10	Evolution (Ch. 12 & 13)
		Assignment 7 Due
14	April 17	Diversity (Ch. 15, 16, 17)
		Quiz 5
15	April 24	Case Study #3
		Assignment 8 Due
16	May 1	Ecology (Ch. 18 & 19)
	Wednesday,	Final Exam
	May 10	

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