Biology 110: Biology for non-majors

UNM Valencia Campus

Semester: Fall

Year: 2015

CRN #: 22763 Section 501

Credits: 3 credit hours

Course Description: This course is an overview of biological principles important for the non-major in today's world. Ecological, evolutionary, and molecular topics will be discussed. *Credit is not applicable toward a biology major or minor.*

Instructor: Dr. Ben Flicker

Contact Information: My office is in the Academic Office in the Arts and Sciences building. My phone number on campus is 505-925-8600. My email address is benflicker@unm.edu. Aside from my office hours and immediately before and after class, email is the best way to contact me.

Office hours: Tuesdays 9:30-10:00, Wednesdays 12:00-1:30, or by appointment.

Textbook: Biology: The Essentials. Marielle Hoefnagels, 2016. 2nd edition, McGraw Hill, Publisher.

Student Learning Objectives:

- 1.) Students will display an understanding of the scientific method.
- 2.) Students will show comprehension of basic ecological concepts.
- 3.) Students will exhibit familiarity with basic plant and animal structure, function, growth and development.
- 4.) Students will demonstrate knowledge of basic concepts and mechanisms of genetics and inheritance.

5.) Students will demonstrate the ability to apply concepts learned to critically examine biology stories in news media.

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 began 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'.

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 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.

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 second midterm as well as all previous material. The final exam will be worth 150 points.

Quizzes: 5 quizzes will be given throughout the quarter. These will be worth 25 points each with the lowest grade dropped (for a total of 100 points towards the final semester grade). These will be used as practice for the exams. If you are struggling on the quizzes you will likely struggle on the exams. If you need help please see me. Studying for the sciences often requires different study methods

from those used in other courses. I am here to help you succeed in this course in any way I can.

Course Webpage: The course webpage can be found by logging in to <u>learn.unm.edu</u>. There, I will post course documents like the syllabus as well as the learning objectives, exam study guides, homework assignments, and other relevant course material.

Learn Smart Activities: Through the course connect webpage (go to this address to register: http://connect.mheducation.com/class/b-flicker-tth-1030-1145) you will be responsible to complete activities for each chapter assigned by the due date. These are designed to help you target your studying to areas where you are in need of work so that you can be more effective and efficient in your studying. These activities will be a part of your grade and are required for you to pass the course.

Homework: 4 homework assignments will be given throughout the quarter. These will require you to apply concepts learned in the course to the real world. These assignments will be due the day of the lecture review sessions before each exam. You will be given at least 2 weeks advance notice of each assignment. These assignments are worth 25 points each, for a total of 100 points.

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.com server for use on computers and smartphones.

Review Sessions: The lecture period immediately preceding the exams will be used as lecture review sessions. A designed review of the relevant concepts for the exam will be covered, but students are strongly encouraged to bring questions they have to go over. If this review session is not enough, extra group review sessions away from class time will gladly be provided by the instructor.

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)
- 160 points: Learnsmart Activities (20 activities @ 8 points each)
- 100 points: Homework (4 assignments @ 25 points each)
- 100 points: Quizzes (4 quizzes @ 25 points each)
- 300 points: Exams (2 exams @ 100 points each)
- 150 points: Cumulative final exam
- = 840 Total points

Tentative Course Schedule*

Week	Subjects covered	Homework/ Quizzes
8/18/15	Course Introduction/ Chapter 1	Learnsmart 1
8/20/15	Chapter 1: The Scientific Study of Life	
8/25/15	Chapter 2: The Chemistry of Life	Learnsmart 2
8/27/15	Chapter 2: Organic molecules	
9/01/15	Chapter 3: Cellular Biology	Quiz 1
9/03/15	Chapter 3: Cellular Biology	Learnsmart 3
9/08/15	Chapter 4: The Energy of Life	Learnsmart 4
9/10/15	Chapter 5: Photosynthesis (5.1-5.6)	Learnsmart 5
9/15/15	Chapter 6: Cellular metabolism(6.1-6.6)	Learnsmart 6 & quiz 2
9/17/15	Lecture Review	Homework 1 due
9/22/15	Exam 1 (Chapters 1-6)	Exam 1
9/24/15	Chapter 7: DNA (7.1-7.6)	Learnsmart 7
9/29/15	Chapter 8: Mitosis	Learnsmart 8
10/01/15	Chapter 9: Meiosis (9.1-9.6)	Learnsmart 9
10/06/15	Chapter 10: Patterns of Inheritance (10.1-10.5)	Learnsmart 10 &
10/08/15	Fall Break: No Class	Quiz 3
10/13/15	Chapter 10: Patterns of Inheritance (10.6-10.9)	
10/15/15	Lecture Review	Homework 2 due
10/20/15	Exam 2 (Chapters 7-10)	Exam 2
10/22/15	Chapter 12: Forces of Evolutionary Change	Learnsmart 12

10/27/15	Chapter 13: Evidence of Evolution	Learnsmart 13
10/29/15	Chapter 14: Speciation and Extinction	Learnsmart 14
11/03/15	Chapter 16: Evolution and Diversity of Plants	Learnsmart 15
11/05/15	Chapters 21 & 22: Plants	Learnsmart 21-22 & quiz 4
11/10/15	Lecture Review	Homework 3 due
11/12/15	Exam 3 (Chapters 12,13,14,16,21&22)	Exam 3
11/17/15	Chapter 17: Evolution of Animals	Learnsmart 17
11/19/15	Chapter 23: Animal Tissues and Organs	Learnsmart 23
11/24/15	Chapter 18: Population Ecology	Learnsmart 18
11/26/15	Thanksgiving: No Class	
12/01/15	Chapter 19: Communities and Ecosystems	Learnsmart 19 &
12/03/15	Lecture Review	quiz 5
		Homework 4 due
12/10/15	Cumulative Final Exam (10:30-12:30)	

^{*} 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 110 at UNM-VC. I am very excited to be here to help you continue your education and achieve your goals.