## Biology 110: Biology for non-majors

## **UNM Valencia Campus**

Semester: Spring

**Year:** 2016

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: Wednesdays 10:30-11:30, Thursday 9:00-10:00, or by appointment.

Textbook: Biology: The Essentials. Marielle Hoefnagels, 2016. 2nd edition, McGraw-Hill Education, New York, NY. Access to the "connect" website for the textbook is required for the course. It can be purchased on its own (including access to the electronic book) or as included with the new textbook. It does not come included with the used book. If you buy online access on its own (either from the bookstore or the connect website) you can buy a loose-leaf copy of the textbook from the connect website for \$10.

## **Student Learning Objectives:**

- 1.) Students will display an understanding of the scientific method.
- 2.) Students will exhibit familiarity with basic plant and animal structure, function, growth and development.

- 3.) Students will demonstrate knowledge of basic concepts and mechanisms of genetics and inheritance.
- 4.) 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 as soon as possible so we can meet your needs suitably and quickly.

Learning Objectives: For each chapter 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 your 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 midterm as well as all previous material. The final exam will be worth 150 points. It will be taken on exam week (May 9-13).

Quizzes: 5 quizzes will be given throughout the quarter. These will be worth 25 points each and the lowest grade will be 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 subjectss. I am here to help you succeed in this course in any way I can.

Homework Assignments: 4 homework assignments will be given throughout the semester. These will require you to apply concepts learned in the course to the real world. You will be given at least 2 weeks to complete these assignments. These assignments are worth 25 points each for a total of 100 points. Late homework assignments will not be accepted.

Course Webpage: Course materials will be posted on the course website (<a href="https://learn.unm.edu">https://learn.unm.edu</a>). This includes the syllabus, all assignments, grades, announcements, and links to email the instructor and other students in the course. You are responsible for all announcements that may be posted on the course page, so please check regularly.

Learn Smart Activities: Through the course connect webpage (go to this exact address to register: <a href="https://connect.mheducation.com/class/b-flicker-spring-2016">https://connect.mheducation.com/class/b-flicker-spring-2016</a>) you will be responsible to complete activities for each chapter assigned by the due date. These are designed to help target your studying to areas where you are in need of work, making you 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.

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 server for use on computers and smartphones.

**IN-class activities:** In-class activities will be interspersed throughout the semester. Some are indicated on the course schedule, others are not. You will be required to attend and participate in these activities in order to receive points for them. They will be worth a total of 60 points for the semester.

**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 points each)
- 60 points: In-class participation
- 140 points: Learnsmart Activities (14 activities @ 10 points each)
- 100 points: Homework (4 assignments @ 25 points each)
- 120 points: Quizzes (4 quizzes @ 30 points each)
- 300 points: Exams (3 exams @ 100 points each)
- 150 points: Cumulative final exam
- = 900 Total points

## **Tentative Course Schedule\***

Week	Subjects covered	Homework / Quizzes
1/19/16	Course Introduction/ Chapter 1	Learnsmart 1
1/21/16	Chapter 1: The Scientific Study of Life	
1/26/16	Chapter 2: The Chemistry of Life	Learnsmart 2
1/28/16	Chapter 2: Organic Molecules	
2/2/16	Chapter 3: Cellular Biology	Learnsmart 3
2/4/16	Chapter 3: Cellular Biology	Quiz 1
2/9/16	Chapter 4: The Energy of Life	Learnsmart 4
2/11/16	Chapter 5: Photosynthesis	Learnsmart 5
2/16/16	Chapter 6: Cellular Metabolism	LS 6 & Q 2
2/18/16	Lecture Review	
2/23/16	Exam 1	Homework 1
2/25/16	Chapter 7: DNA	Learnsmart 7

3/1/16	Chapter 8: Mitosis	Learnsmart 8
3/3/16	Chapter 9: Meiosis	Learnsmart 9
3/8/16	Chapter 10: Patterns of Inheritance	Learnsmart 10
3/10/16	Chapter 10: Patterns of Inheritance	Quiz 3
3/14-18	Spring Break: No Classes	
3/22/16	Lecture Review	
3/24/16	Exam 2 (Chapters 7-10)	Homework 2
3/29/16	Chapter 12: Forces of Evolutionary Change	Learnsmart 12
3/31/16	Chapter 14: Speciation and Extinction	Learnmart 14
4/5/16	Chapter 16: Evolution and Diversity of Plants	Learnsmart
4/7/16	Chapter 16: Evolution and Diversity of Plants	16
4/12/16	In-class Activity: Plants	Quiz 4
4/14/16	Lecture Review	Exam 2
4/19/16	Exam 3	Homework 3
4/21/16	Chapter 17: Evolution and Diversity of Animals	
4/26/16	Chapter 17: Evolution and Diversity of Animals	Learnsmart
4/28/16	Chapter 17: Evolution and Diversity of Animals	17
5/3/16	In-Class Activity: Animals	Quiz 5
5/5/16	Lecture Review	
5/12/14	Cumulative Final Exam (10:30-12:30)	Homework 4

<sup>\*</sup> 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.