## Biology 1140: Biology for Health-Related Sciences/ Non-Majors

## UNM Valencia Campus

Semester: Summer

**Year:** 2020

CRN #: 28143 Section 501.

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 in room 100B in the Health Sciences building. 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: As of the campus re-opening, I will be keeping some in-person office hours: Mondays 10:00-1:00 and Wednesdays 10:00-1:00. I will also be available to meet over zoom during these times if you do not want to venture to campus. To meet over zoom, send me an email and I will create a zoom meeting for us. I am also generally available 10:00-5:00 Monday-Thursdays to meet over Zoom, just contact me to set up a time.

**Textbook:** *Inquiry into Life*, Sylvia S. Mader & Michael Windelspecht, 2020. 16th edition, McGraw Hill. **Required.** You can purchase access to the ebook along with the lab activities by registering for the class through the following website: <a href="https://connect.mheducation.com/class/f-ben-summer-2020">https://connect.mheducation.com/class/f-ben-summer-2020</a>

A printed copy of the book (optional) may be acquired through the campus bookstore or other online outlets. The printed book at the campus bookstore is a custom book only containing the chapters we will cover. This lowers the cost of the book, but also alters the arrangement of chapters from the ebook. The title of each chapter, however, is the same as how it is listed in the schedule at the end of the syllabus.

**UNM Learn:** 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, announcements, the class discussion board, links to class Zoom meetings, and all exams.

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, 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.

**Learning Center:** The learning center has a tutor specific to our class, ready to help you. To register and set up an appointment, go to the following link: <a href="https://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html">https://valencia.unm.edu/campus-resources/the-learning-center/learning-center.html</a>

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

Missed exam/quiz policy: While all exams and assignments will be done and submitted online, they will have due dates. If you anticipate that you will miss a due date, let me know as soon as possible for an extension. These will be given within reason, on a case-by-case basis.

**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.

Class Videos: New lecture material will be presented as recorded videos. Links to these videos will be posted to the 'Class Videos' section on the class learn page. I will venture to keep these videos relatively short, so there may be 1-3 per topic posted. New Videos will be posted by Monday and Wednesday afternoons.

**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. They will be part of the class activity for each topic.

Weekly To-Do List: To make your responsibilities each week clear, a to-do list for each week will be posted to the course learn page in the 'Weekly To-Do Lists' section. This will include all homework, class participation, and exams that will be due by the end of that week. This will be posted by Monday afternoon each week.

**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.

Homework: 2 Homework assignments will be given in class Every Week (with the exception of weeks when there is an exam). 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 at the end of the week on the week in which they are assigned. One homework each week will be posted by Monday afternoon, the second by Wednesday afternoon. These homework assignments will be posted to the 'homework' section of the course learn page. They will be in the form of word documents that you may either type to fill in, or print out and fill in, then submit an image of your completed homework. Submissions will be made in the 'homework' section of the learn page.

Weekly Zoom Meetings: For a chance to interact and answer questions, optional, weekly Zoom meetings will be held. Links to these meetings will be posted in the 'Zoom meetings' section on the class learn page. The time of these meetings will be determined by a class vote in the discussion board page. This is a chance for the class to ask any questions, and also the instructor will provide review and practice problems based on the week's material. These meetings will be recorded and posted to the learn page for those unable to attend.

Class Participation: Class participation is an essential part of this course. To help encourage your participation, 80 of your 650 total points this semester will be based on class participation. These points will be earned through weekly posting on the course discussion board. You will be required to answer and explain one question from one of the class activities that week on the class discussion board. Each posting will be worth 10 points. You will not be graded based on posting a correct/incorrect answer, just that your answer is justified by yourself in the post.

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.

• 120 points: Homework assignments (12 assignments @ 10 points each)

• 80 points: Class participation

• 300 points: Exams (3 exams @ 100 points each)

• 150 points: Cumulative final exam

• = 650 Total points

Week	Subjects covered	Homework/ Quizzes
6/1/20	Chapter 1: The Study of Life	Homework 1
6/3/20	Chapter 2: The Molecules of Cells	Homework 2
6/8/20	Chapter 3: Cell Structure and Function	Homework 3
6/10/20	Chapter 4: Membrane Structure and Function	Homework 4
6/15/20	Exam 1 (Chapters 1-4)	Exam 1
6/17/20	Chapter 5: Cell Division	Homework 5
6/22/20	Chapter 6: Metabolism: Energy and Enzymes	Homework 6
6/24/20	Chapter 7: Cellular Respiration	Homework 7
6/29/20	Exam 2 (Chapters 5-7)	Exam 2
7/1/20	Chapter 25: DNA structure and Gene Expression	Homework 8
7/6/20	Chapter 23: Patterns of Gene Inheritance	Homework 9
7/8/20	Chapter 24: Chromosomal Basis of Inheritance	Homework 10
7/13/20	Exam 3 (Chapter 23-25)	Exam 3
7/15/20	Chapter 11: Human Organization	Homework 11
7/20/20	Chapter 14: Digestive System and Nutrition	Homework 12
7/22/20	Final Exam (Cumulative)	Final Exam

\* 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 exams.

Thank you for registering for Biology 1140 at UNM-VC. I am very excited to be here to help you continue your education and achieve your goals.