BIOL 1140 – Biology for Health Sciences

Fall 2026 – CRN #66764 - Lecture Syllabus

Format: Face to Face

Lecture: Monday, Wednesday

1:30pm – 2:45pm

Welcome to BIOL 1140!

Biology is the study of life. Understanding the molecules that form cells and determine their characteristics is vital to understanding life. Everything we encounter is made up of molecules, living or not. We will learn about the cell and its characteristics and organelles. For our bodies to work, cell require energy from the food we eat, which is regulated by specific processes that we will learn about this semester. Deoxyribose nucleic acid – known as DNA – forms our chromosomes, which determine the genetic makeup of an organism. How do our cells divide and why do they do it? Mitosis and Meiosis are two vital mechanisms of cell division. Traits, such as those that may pass on disease to offspring, are passed on from generation to generation. To end the semester, we will briefly cover anatomy and physiology of the human body. Biology is life and it is important to understand the basics of this category.

I encourage you to dive deeper into the knowledge that biology has to offer.

Course Description

This class is designed to introduce those interested in health science careers to ideas based in chemistry, cell biology, metabolic processes, genetics, and the regulation of gene expression.

Learning Outcomes of the Course

Upon completion of this course, students will be able to:

Intro to Biology 1. Explain the central ideas and processes of biology (organization of life, evolution, selection and adaptation, and application of the scientific method) 2. Explain the role of science and its role in critical thinking
Intro to Chemistry 1. Apply basic chemistry topics to the biology of cells
Cells (Eukaryotes and Prokaryotes) 1. Be able to understand and describe the structure and function of cells 2. Compare/contrast eukaryotic cells to prokaryotic cells 3. Describe the components and mechanisms of cellular metabolism
Genetics 1. Describe both DNA structure and replication (Mutation and DNA repair) 2. Explain the central dogma of genetic flow and gene expression 3. Explain the relationship between sexual reproduction, genetic diversity, and inheritance 4. Compare/contrast mitosis to meiosis 5. Describe the patterns of inheritance and human genetic disorders
Human Physiology 1. Explain homeostasis 2. Identify the function of major tissues, organs, and organ systems

Overall Course Goal: Understand scientific concepts and apply them to future classes and career goals.

Contact Information:

Email: vmcfail@unm.edu

Office Hours:

Monday: 12-1pm

Tuesday (online only): 12-1pm

https://zoom.us/j/91891064021?pwd=NPM9J6tJoNGpdwLuTHaRFYD2nHtbO2.1

Meeting ID: 918 9106 4021

Passcode: TMOffice

Wednesday: 12-1pm

Note: I am willing to meet outside of these hours by appointment! Monday and Wednesday are the days that I am on campus, but I am willing to meet over Zoom/Google meets as well! Please try to schedule Tuesday hours ahead of time if possible!

Grading Criteria

Chapter Reading Assignments: Chapter reading assignments are due the evening before class (Sundays at 11:59pm unless otherwise mentioned). Each reading assignment is 5pts each. Late is -50% of the grade. Only accepted 5 days late.

Study Guide/Chapter Review Assignments: Before each exam, a study guide will be given and will be graded for points to assist in preparing you for exams. Each study guide will be worth 10pts. *Turning in a study guide after an exam will result in 0 points earned.*

Exams: Exams will be 100 points each. There will be 4 exams throughout the semester (not including the final exam) and will be cumulative of the chapters covered. You will be given one class period to complete each exam. Exams will be given in class, unless the student has Accommodations arranged through the Office of Student Affairs. You will not be able to use your notes, textbook, or online resources. If you have Accommodations, please make me aware as soon as possible.

Attendance: Attendance is worth 0.5pt per class period (totally to 1pt per week). You must be in class to earn these points. This includes being present while participating in discussions and activities. You will be responsible for submitting

the material required for attendance (up to the instructor's discretion of the material).

Semester Project: During the semester, you will be asked to research your future career path. This is meant to help you learn about what you may do in your future career and helps guide you in the right direction in your education. A description of this project will be posted on Canvas, including its syllabus.

Final Exam: The final exam for this course is cumulative. You will have 2 hours to take this exam face to face at the end of the semester. The final is worth 150pts.

Assignment Name (amount)	Points per Assignment:	Total Points:	Percentage of overall grade:
Chapter Reading Assignment (11)	5 pts each	55 pts	~8%
Study Guide/Chapter Reviews (5)	10 pts each	50 pts	~7%
Semester Exams (4)	100 pts each	400 pts	~55%
Attendance (16wks)	0.5 pts per class	16 pts	~2%
Semester Project (1)	50 pts	50pts	~7%
Final Exam (1)	150	150 pts	~21%
TOTAL		721 pts	
A+ 100% or higher A 91-99% A- 90%	B+ 88-89% B 81-87% B- 80%	C+ 78-79% C 71-77% C- 70% (Not passing)	D+ 68-69% D 61-67% D- 60% F <60%

Required Course Materials

Textbook: *Inquiry into Life* by S. Mader and M. Windelspecht, 16th edition, 2020, McGraw Hill Publisher. The bookstore carries a special edition of this book – Biology for Health Sciences – University of New Mexico-Valencia.

OR

Ebook: *Inquiry into Life* by S. Mader, 18th edition, 2025, McGraw Hill Publisher. The bookstore has the eBook **EISBN: 9781264407125.** This will also be accessible through the ebook on UNM Canvas.

UNM Canvas: http://canvas.unm.edu The campus webpage contains resources you need to succeed in the course. Login using your UNM username and password. ***You are responsible for any and all announcements, assignments, tests and/or any changes to the syllabus that will be posted to Canvas. Announcements will be sent every Friday. Please be sure to check your email/inbox frequently for updates regarding the class.***

Course Policies/Information

This is a face to face course and is three credit hours. Our class will meet face to face for two 75-minute sessions per week under direct instruction for sixteen weeks during the current semester. Students are expected to complete a *minimum* of six hours of out-of-work (readings, homework, study, assignment completion, and class preparation) each week.

Course Attendance: Attendance for this course is mandatory. Be on time, participate in class, and show up to get the information you need. You are expected to "sign-in" to document your attendance to this course. Students are held responsible for all the material and information presented in class regardless of attendance. Exceptions can be made per student basis dependent upon emergency. **Students will earn points for their attendance each week (1pt per week, 0.5pts per lecture class) from submitting completed notes, or by submitting an answer from a question asked by the instructor. Pictures of the whiteboard are not acceptable for attendance and will result in -0.5pts for that lecture period. Write both your name and date on the assignment to receive credit.

Make-Up Exams: Make-up exams will be given to students with a documented emergency. You must notify the instructor prior to the day of the exam. For the final exam, you must contact the instructor within 24 hours of the final. No finals

can be made up after 24 hours. Documentation of the emergency is required to make up the final.

Reading Assignments: You will have weekly reading assignments that are due to Canvas/email at 11:59pm the evening before the topic is covered. Typically, assignments will be provided by Wednesday and will be due Sunday (11:59pm).

Late Assignments: Late assignments are only accepted within 10 days following the due date. You will be responsible for turning in your assignments on time, but your grade is subject to a 50% decrease.

AI Usage: Any assignment you turn in should not use AI. Everything should be put in your own words. That said, AI can be used privately to help you organize your notes and explain some concepts. Note that AI is not always correct, so be sure to double check!

Course Policies/Information Continued

Withdrawal: The last day to withdraw from the course without a "W" on your transcript is September 4th, 2026 at 5pm using UNM Canvas. The last day to withdraw from the course without the Dean's signature/permission on LoboWEB is November 6th, 2026. Please see https://registrar.unm.edu/semester-deadline-dates/index.html Fall 2026 for important dates. I do not submit "W" after the 12th week of classes.

Cell Phones: Please refrain from using cell phones during class by silencing them. This also applies to exam days. If you need to step out during class, please quietly leave the room without disrupting the class. If you need to step out of the classroom during a test/quiz, please leave your phone on your table before stepping out.

Disruptive Behavior: Please avoid disruptive behaviors in the classroom and in online communications. Some of these behaviors include excessive talking, leaving

and entering class, and arriving late to class. For online communication and interactions follow the Online Behavior section.

Plagiarism: Submit work that is your own. Always cite works in APA format if needed. Copying from Google, your classmates, or your book is considered plagiarism. Write answers in your own words. *If caught, you will only receive one warning. On the second infringement, the UNM Science and Wellness Department chair will be notified. A third time will result in dropping you from the course.*

Online Behavior: This section is meant to provide guidelines for the behavior and communication between you and your classmates online. We are all held to the following guidelines that will provide both a safe and respectful environment for constructive critiques, discussions, and other course related communication between you and your classmates. These guidelines will be upheld in any online communication form.

Your behavior should be similar to that of which you treat peers or other people in face-to-face communication. Please be mindful of differences in backgrounds, which may be cultural, language-based, political, and/or religious.

Try to be open minded and respectful of other's views and opinions. Disagreements must be respectful. Do flame your peers. Instead, provide constructive feedback while responding to each other in Discussion Forums. In forums, stay on topic while reading and responding to the discussion.

Please use proper grammar and spelling in your responses.

Avoid using all CAPITAL LETTERS as it suggests a negative tone in your writing. Be sure to reread posts for offensive language before submitting it.

If you are in a conflict with another student, email the professor immediately.

Don't send confidential information through online communications. If you suspect something out of place, change your password.

Emails:

Emails should be written concisely. Use your @unm.edu account to send emails to me. In your subject line, you should include "BIOL 1140" when writing an email to me.

Before forwarding an email, ask the author for permission before sending it to another classmate.

Always start an email with a formal salutation. (e.g. Good afternoon Tori, [press enter then start your message])

Discussion Boards/Forum Usage:

Include "topic-Your Name" in your subject line. Your response should be a concise paragraph using your own words while citing references in APA format or credit classmates. Do not repeat the post that another student has made.

Accommodations:

UNM-Valencia is committed to providing courses that are both inclusive and accessible for all students. My role is to facilitate a classroom with both characteristics to provide the best possible education I can. If you experience physical, academic, or mental health barriers, please contact me via my unm email. I am not legally permitted to inquire about the need for accommodations. We can meet your needs by contacting the Director of Student Affairs, Hank Vigil (vigilh@unm.edu or (505) 925-8581).

Academic Integrity:

Academic integrity is vital to succeeding in college. Plagiarism or cheating is not tolerated, and any instances will result in a grade of zero for that assignment. Here is the link to the UNM Academic Dishonesty Policy https://policy.unm.edu/regents-policies/section-4/4-8.html.

The policy states: *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 who otherwise fails to meet the expected 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 is defined as*: "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."*

Student Support:

UNM-Valencia is dedicated to your successes, and we provide services that offer guidance. Please feel free to ask regardless of whether it is an academic or other issue.

- PASOS Resource Center: http://valencia.unm.edu/campus-resources/pasos/pasosresource-center/resource-guide.html
- TimelyCare: https://valencia.unm.edu/campus-resources/pasos/pasos-resource- center/timelycare.html TimelyCare provides 24/7 access to virtual care from anywhere in the United States at no cost. For additional questions or support in downloading the app and creating your profile, contact PASOS Resource Center at pasos@unm.edu.
- UNM-Valencia Learning Commons (Tutoring)
- TRIO Student Support Services: http://valencia.unm.edu/students/ssstrio/index.html
- UNM-Valencia Food Pantry: Free snacks, meals, and goodies
- Jobs on Campus: https://valencia.unm.edu/students/financial-aid/studentemployment.html

Equal Opportunity and Non-discrimination:

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-- 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 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, see https://oeo.unm.edu/title-ix/index.html.

Citizenship and/or Immigration Status:

All students, regardless of citizenship, residency, or immigration status, are welcome in this class. Your instructor will respect your privacy if you disclose your status. Family emergency related absences are usually excused with reasonable notice to the professor. The Administration's welcome is found on our website: http://undocumented.unm.edu/.

Respectful and Responsible Learning:

Everyone on the campus, but especially in the classroom, is responsible for ensuring that learning occurs both safely and equitably. UNM has policies to preserve community (Student grievances (Faculty Handbook D175 and D176), academic dishonesty (FH D100), and respectful campus (FH CO9)).

Support in Receiving Help and Doing What is Right:

I encourage you all to become familiar with services and policies on campus to help you navigate your time at UNM successfully. See students.unm.edu or ask me for more information and I can assist in finding a resource.

Expected Fall 2026 Schedule

This schedule is subject to necessary changes by the instructor

Week	Date (M&W)	Chapter: Topic
1	8/17	Class Intro/ 1: Study of Life
	8/19	1: Scientific Method
2	8/24	2: Basic Chemistry
	8/26	2: Molecules of Life I
3	8/31	2: Molecules of Life II – Chemical Bonds
	9/2	2: Properties of Water and Proteins
4	9/7	No Class: Labor Day
	9/9	Exam 1: Chapter 1 & 2
5	9/14	3: Cell Biology
	9/16	3: Cell Structure
6	9/21	3: Cell Structure
	9/23	4: Cell Membrane
7	9/28	4: Cell Membrane
	9/30	TBD – Exam Review?
8	10/5	Exam 2: Chapter 3 & 4
	10/7	6: Energy and Enzymes
9	10/12	6: Energy and Enzymes
	10/14	7: Cellular Respiration
10	10/19	7: Cellular Respiration
	10/21	Exam 3: Chapter 6 & 7
11	10/26	25: DNA Replication
	10/28	25: DNA Replication
12	11/2	25: Gene Expression
	11/4	5: Mutations
13	11/9	5: Cell Cycle
	11/11	5: Cell Division
14	11/16	5: Meiosis
	11/18	Exam 4: Chapter 25 & 5
15	11/23	Genetic Inheritance I
	11/25	Genetic Inheritance II
16	11/30	Genetic Inheritance II
	12/2	Semester Review
FINAL	12/9	Final Exam 1:30-3:30pm

Other Important Dates:

Date	Event	Other Info
8/17	Classes Start	
8/28	Last day for Enrollment Cancellation	
9/4	Last day to drop a course without a "W" grade and get a 100% refund	Must be done by 5pm
9/7	Labor Day	
11/6	Last day to drop on LoboWeb	
10/8-10/9	Fall Break	
11/26-11/29	Thanksgiving Break	
12/23/2026-1/1/2027	Winter Break	