Biology for Health Sciences

Bio 1140-501
Fall 2025

Syllabus

Instructor:	Dr. James Farslow
Classroom:	Online via Canvas (canvas.unm.edu) and lobomail. You must have a UNM net ID and access to a reliable internet service.
Class hours:	Asynchronous – At your convenience (explained below).
Office:	Online, via email (below), or Zoom
Office Hours:	Tuesday and Wednesday, 11:00 am – 12:00 pm, Zoom; or by appointment (email me). Zoom meetings: https://unm.zoom.us/j/92321625865 Meeting Number: 923 2162 5865 These times may be subject to change. During the school week email me with questions or problems.
Email:	jfars@unm.edu (Best way to contact me during the school week. I do not usually respond to e-mail from Friday evening to Sunday evening.)

Course Description (from UNM catalog): This introductory biology course for students interested in health science careers focuses on the concepts of chemistry, cell biology, metabolism, genetics, and regulation of gene expression. Not accepted toward the Biology major.

Credit for both this course and BIOL 1110 may not be applied toward a degree program.

The lecture is a 3 credit hour course.

Student Learning Objectives: At the completion of this course students will be able to:

1. Explain the central ideas and process of biology, including the organization of life, evolution, selection and adaptation of the scientific method.
2. Explain the role of science and critical thinking in society.
3. Apply basic chemistry to the biology of cells.
4. Describe the structures and functions associated with eukaryotic cells and compare/contrast to prokaryotic cells.
5. Describe the components and mechanisms of cellular metabolism.
6. Describe DNA structure and replication, including mutation and DNA repair.
7. Explain the central dogma of genetic information flow, explain gene expression and how it's regulated.
8. Explain the relationships between sexual reproduction, genetic diversity, and inheritance.

9. Describe and contrast the processes of mitosis and meiosis.
10. Describe patterns of inheritance and human genetic disorders.
11. Explain homeostasis and identify major tissues, organs and organ systems and their function.

Text: "Inquiry Into Life" by S. Mader, 17th Edition, 2022.

Computer Requirements: You will need to have access to a reliable internet service, preferably using a computer. My office hours will be conducted via Zoom during the times listed above. Email me if you have any questions or problems. Be aware I do not usually respond to emails from Friday evening to Sunday evening.

Course Webpage on Canvas (canvas.unm.edu): Course information including this syllabus, video material, and grades will be available via canvas.unm.edu. This course will appear in your Canvas course listing. I will also send out emails to the class periodically. Students should check email at least every couple of days, if not every day.

Attendance and Late Assignment Policy: As the class is asynchronous online, there is no attendance to be taken. However, assignments must be completed each week by Sunday at midnight to be accepted. You have all week at your own convenience to read or watch the material and complete the assignment, so except for extreme circumstances, **there are no late assignments, quizzes, or exams**. It is the prerogative of the instructor to decide what is an extreme circumstance. Email me if you have something unusual that comes up that interferes with your ability to complete assignments. Quizzes and exams will be administered on Canvas. The dates for the exams are on the course outline below.

It is not the responsibility of the instructor to drop you from the course if you stop attending or completing assignments. You may be dropped if you're not participating, but don't rely on that if you decide to drop. It is the student's responsibility to drop the course.

Academic dishonesty (from the UNM Catalog): "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, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been 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 on quizzes, tests or assignments; claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University."

Additionally:

Copying and pasting material from a webpage into your homework assignment is plagiarism. The same method you use to look up the information on the internet is probably the same method I will use to check if you copied it. All I need to do is Google your answer, and yes, I do check.

Also, if you work on homework assignments together, make sure the assignment is in your own words and with your own graphs. Don't just copy what your study partner wrote down.

This also applies to anyone who allows someone to cheat off of them.

With regard to the use of AI, a word of caution. AI can sometimes give you answers that are not correct. I have observed this myself, but I'm sure it depends on the specific AI. It would be better not to rely on AI for answers, but I don't prohibit the use of it, except on quizzes or exams. Use it like you would use any search engine to gain information. Please don't use it to answer the problems for you. And make sure to put answers in your own words.

Student Behavior: All students will comport themselves as adults in an academic setting. On Zoom, be courteous and respectful. The same is true on the Discussion Board. Please read the Netiquette paper on the Pages link of Canvas.

Discussion Board: The Discussion Board is on Canvas. There will be questions posted in video format each week, and students will respond with at least **three substantive complete** sentences about the topic to receive full credit. Do not just respond "That's interesting" or "Okay". If there are two parts to the question, make sure to address both parts for full credit. These discussion responses will count as 10 points each toward the student's grade. There is usually not a right or wrong answer. The questions are intended to stimulate thinking about the subject. Students **must** post their responses to me by Sunday midnight each week for credit. Students are also encouraged to respond to each other and discuss the week's topic. The discussion board will be asynchronous, meaning that you need to remember you are sending messages that people can respond to when they are able, not a real-time conversation. Students are expected to treat each other and opposing viewpoints with respect. **No trolling.** Students will adhere to the principles of Netiquette, which can be found on the course Canvas site under Course Information. This should not, however, preclude students from disagreeing or correcting each other, but do it respectfully. I do read all of your responses, but because of the number of responses I usually do not respond to them.

Weekly Assignments: Homework assignments will be posted on Canvas in the Assignments link. These assignments will consist of questions about the material covered that week. Students can work on the assignments together, just make sure that you write your own answers, don't just copy another student's answers. The assignments will be due Sunday at midnight each week. There will be 16 assignments at 10 points each. Assignments will require you to fill in the blanks and upload the document to Canvas.

Quizzes: Quizzes will be administered on Canvas on Friday of the week listed in the Course Outline below, and will be available from 8 am to midnight. The quizzes will be multiple choice, and you will have 30 minutes to complete them once you start. The quizzes will include material for the week they are posted. There will be 5 quizzes worth 25 points each, and the lowest quiz grade will be dropped. Material for that week will be fair game for the exams. Quizzes are intended to be done individually, not as a group.

Exams: Two midterm exams will be administered on Canvas, worth 150 points each. These exams will consist of multiple choice questions. Students will have one hour to complete the midterms once they start. The final exam will be of a similar format, worth 200 points, and will be comprehensive. Students will have an hour and a half to complete the final exam. The dates for the exams are listed in the Course Outline below. Material for that week will be fair game for the exams. All exams are intended to be done individually. They are not a group effort.

Grading Breakdown:

Quizzes (4 best @ 25 points each)	100
Homework Assignments (16 @ 10 points each)	160
Discussion Boards (16 @ 10 points each)	160
2 Midterm Exams (@ 150 points each)	300
Final Exam (comprehensive)	200
Total points	920

Final grades will be awarded based on the percentage of points earned relative to total points. **Note:** Please do **not** think at the end of the semester that if you have a 60% going into the final exam, you only need to make an 80% on the final to pass the course. **This is incorrect.** Remember the final exam is only 200 points out of 920. If you make 70% or higher on all coursework and exams through the semester, including the final exam, you will pass.

Please read "How to Succeed in This Course" under the Pages link on Canvas.

Grade	From	To
A+	98	100
A	93	97.99
A-	90	92.99
B+	88	89.99
B	83	87.99
B-	80	82.99
C+	78	79.99
C	70	77.99
D	60	69.99
F	0	59.99

Extra Credit: Students can earn up to 30 points of extra credit by writing a review of a primary research paper. The paper must have been published in a peer-reviewed science journal, and be related to a biological subject. You must email me the paper in advance so I can look it over and approve it first.

Students with Disabilities: If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that your accommodations are provided in a timely manner. If you require accommodations, please contact me as soon as practical.

Testing Center: Use of the Testing Center will only be for those identified by Equal Access Services as requiring it, or for unusual circumstances as determined by me.

Title IX Statement. 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 pg 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.

Course Outline

Date	Week	Subject	Chapter	Quizzes/Exams
18-Aug	1	Introduction, What is Science? What is Life?	1	
25-Aug	2	Chemical Reactions	2	
1-Sep	3	Biological Molecules	2	1
8-Sep	4	Cell Biology	3	
15-Sep	5	Cell Structure	3	2
22-Sep	6	Cell Membranes	4	Exam 1 (26 Sep)
29-Sep	7	Energy and Enzymes	6	
6-Oct	8	Cell Respiration **(Fall Break)**	7	
13-Oct	9	DNA Replication and Gene expression	25	3
20-Oct	10	Gene Expression and Mutations	25	
27-Oct	11	Cell Cycle, Mitosis	5	Exam 2 (31 Oct)
3-Nov	12	Meiosis	23	
10-Nov	13	Genetic Inheritance	24	4
17-Nov	14	Chromosomal Inheritance	24	
24-Nov	15	Human Organization **(Thanksgiving 27 Nov)**	11	
1-Dec	16	Human Organization	11	5
8-Dec	17	**Final Exam (12 Dec)**		

Note: Instructor reserves the right to make required changes during the course.