BIOLOGY FOR NON-MAJORS
Biology 1110-501
Fall 2019

Syllabus

Instructor: Dr. James Farslow
Classroom: Arts & Sciences, Room 125
Class hours: 10:30 – 11:45, Tuesday and Thursday
Office: Academic Office, Arts & Sciences, ask Receptionist
Office Hours: Tuesday, 1:30 – 3:30, in the STEM Center in LRC;
Thursday, 4:00 – 5:00, in the STEM Center in LRC;
or by appointment (email me)
Campus Phone: 505-925-8634 (only right before or right after class)
E-mail: jfars@unm.edu (Best way to contact me during the week. I do not respond to e-mail from Friday afternoon to Sunday evening.)

Course Description (from course catalog): This course introduces non-science majors to basic biological concepts including, but not limited to, the properties of life, biochemistry, cell biology, molecular biology, evolution, biodiversity, and ecology.

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

1. Explain the value of the scientific method as a means for understanding the natural world and for formulating testable predictions;
2. Explain how chemical and physical principles apply to biological processes at the cellular level;
3. Understand basic concepts of cell biology;
4. Understand that all organisms share properties of life as a consequence of their common ancestry;
5. Understand fundamental processes of molecular biology;
6. Understand the mechanisms of evolution, including natural selection, genetic drift, mutations, random mating, and gene flow;
7. Understand the criteria for species status and the mechanisms by which new species arise;
8. Understand methods for inferring phylogenetic relationships and the basis for biological classification;
9. Recognize the value of biological diversity (e.g., bacteria, unicellular eukaryotes, fungi, plants, and animals), conservation of species, and the complexity of ecosystems;
10. Explain the importance of the scientific method for addressing important contemporary biological issues.

Text: "Concepts of Biology" available for free from: openstax.org/details/books/concepts-biology. You can download the text as a pdf.

Course Webpage on learn.unm.edu (Blackboard): Course information including this syllabus, assignments, and grades will be available via learn.unm.edu. Additionally, there will be a **discussion board**. I will post a discussion topic Sunday evening each week. Students will then, at a minimum, post one response to each week's topic. This response needs to be at least three substantive sentences about the topic. Do not just respond "That's interesting" or "Okay". These discussion responses will count as 10 points each toward the student's grade. Students **must** post their responses by 11:59 pm Saturday of that week for credit. Students are 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 Blackboard site under Course Information. This should not, however, preclude students from disagreeing or correcting each other, but do it respectfully.

I will also send out emails to the class periodically. Students should check email at least every couple of days.

Attendance Policy: Attendance will be taken each class as per UNM-Valencia policy. Students risk being dropped by the instructor if they have more than four absences. It is the student's responsibility to drop the course if the student no longer wishes to attend or is unable to attend. Students are responsible for finding out what they missed in class. Class begins at 10:30 am. At 10:35 students will be considered late. Students who are late or absent may receive a **zero** for any quiz or exam administered that day unless they have a valid excuse. **Do not be late for exams or quizzes.** Assignments will be printed, and turned in by the end of class on the day they are due. Do not email assignments except in extenuating circumstances and with prior coordination with me. No late assignments will be accepted without a valid reason. Do not wait until the last minute to print assignments. Equipment malfunction (computer, printer, etc.) is not a valid excuse for late assignments. **Exception to the above**: Contact me if you have a valid excuse (illness, death in the family, car accident, etc.) to arrange a make-up or turn in a late assignment, but you will need to provide evidence (doctor's note, etc.). Busy traffic is not an excuse. It is the prerogative of the instructor to decide whether an excuse is valid.

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."

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.

Electronic Device Usage: Students may use laptops or tablets to take notes. However, students will not use these devices for checking e-mail, web surfing, or other non-class activities during class. Cell phones will be silenced during class. No calling, talking, or texting during class. If you have an emergency call, take it outside the classroom please.

Student Behavior: Students will comport themselves as adults in an academic setting. Please do not engage in private conversations or act in an otherwise disruptive manner during class, or you will be asked to leave. If you need to ask the person next to you a question, make it short, do it quickly and quietly. I expect students to extend this courtesy to each other as well.

UNM-Valencia policy: No food or drinks in class.

No vaping or using tobacco products in class.

Quizzes: Quizzes will be short handout assignments usually at the beginning of Thursday's class that won't take more than five minutes. The quizzes will cover material from the previous week or class. Students should make sure to put their name on the quiz to receive credit. When graded quizzes are returned, students will have one opportunity to correct mistakes and return the quizzes by the next class for half credit. There will be 16 quizzes, and the lowest grade will be dropped. The quizzes are worth 10 points each.

Homework: Homework assignments will be posted on Blackboard in the Assignments folder at least two weeks before they are due. These assignments will consist of questions intended to test the student's ability to apply their understanding of concepts covered in class. Answers should be about a page total (500 words) to be turned-in in class before the end of class that day. There will be 6 homework assignments, and the lowest grade will be dropped. The homework assignments are worth 25 points each.

Exams: Two midterm exams will be administered worth 150 points each. These exams will likely consist of around 75 multiple choice or matching questions and two extra credit questions worth two points each. The final exam will be of a similar format, will be comprehensive, consists of around 100 questions, and is worth 200 points, with three extra credit questions worth two points each.

Grading Breakdown:

2 Midterm Exams (@ 150 points each)	300
Quizzes (15 best @ 10 points each)	150
Homework Assignments (5 best @ 25 points each)	125
Discussion Board (16 topics @ 10 points each)	160
Final Exam (comprehensive)	200
Total points	935

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 935. If you make 70% or higher on all coursework and exams throughout the semester (that includes the final), you will pass. **Exception:** Regardless of a student's grade going into the final, if a student completes the final exam with an "A" (at least a 90%), that student will at the very least pass the course with a "C". Any grade above passing will depend on the student's total points.

Please read "How to Succeed in This Course" under Course Information on Blackboard. Remember, the Discussion Board answers are easy points that can only raise your grade as long as you provide a substantive answer.

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 an extra credit of 35 points once for the semester if they voluntarily go to either the New Mexico Museum of Natural History and Science in Albuquerque, or one of the facilities of the Albuquerque BioPark (zoo, aquarium, or botanic

garden). To get the credit, students will need to print their name on their receipt, and bring it to me in class. This is extra credit, not a required part of the course. Students are on their own if they choose to do this. The instructor and UNM-VC are not responsible for mishaps if you choose to take advantage of this.

Additionally, students can earn an extra credit of 20 points for completing the Blackboard Orientation in their course list on Blackboard. At the end of the Orientation, you are supposed to receive a Completion Certificate. E-mail that certificate to me for credit by the deadline which will be announced the first week of class.

Students with Disabilities: If you have a documented disability, please make sure that Equal Access Services has contacted me as soon as possible to ensure that your accommodations are provided in a timely manner.

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

Week	Date	Subjects	Chapters	Assignments Due
1	20-Aug	Introduction, Nature of Science	1	
	22-Aug	Properties and Organization of Life	1	Quiz 1
2	27-Aug	Chemistry of Life	2	
	29-Aug	Biological Molecules	2	Quiz 2
3	3-Sep	Cells	3	HW1 Due
	5-Sep	Cells	3	Quiz 3
4	10-Sep	Photosynthesis - Light Reaction	5	
	12-Sep	Photosynthesis - Calvin Cycle	5	Quiz 4
5	17-Sep	Respiration - Glycolysis and Fermentation	4	HW 2 Due
	19-Sep	Aerobic Respiration	4	Quiz 5
6	24-Sep	**Exam 1**		
	26-Sep	DNA: Function and Replication	9	Quiz 6
7	1-Oct	Transcription and Translation	9	
	3-Oct	Mitosis and Asexual Reproduction	6	Quiz 7
8	8-Oct	Meiosis and Sex	7	HW 3 Due
	10-Oct	**Fall Break - no class**		
9	15-Oct	Mechanisms and Patterns of Inheritance	8	Quiz 8
	17-Oct	Mechanisms and Patterns of Inheritance	8	Quiz 9
10	22-Oct	Mechanisms of Evolution	11	HW 4 Due
	24-Oct	Mechanisms of Evolution	11	Quiz 10
11	29-Oct	**Exam 2**		
	31-Oct	Evidence of Evolution and Speciation	11	Quiz 11
12	5-Nov	Diversity of Life - Phylogenetics	12	
	7-Nov	Plants - Mosses and Ferns	14	Quiz 12
13	12-Nov	Plants - Gymnosperms and Angiosperms	14	HW 5 Due
	14-Nov	Animals - Sponges to Worms	15	Quiz 13
14	19-Nov	Animals - Arthropods and Mollusks	15	
	21-Nov	Animals - Vertebrates and Humans	15	Quiz 14
15	26-Nov	Population and Community Ecology	19	
	28-Nov	**Thanksgiving - no class**		
16	3-Dec	Population and Community Ecology	19	Quiz 15; HW 6 Due
	5-Dec	Ecosystems and the Biosphere	20	Quiz 16
Thur	**12-Dec**	**Final Exam 10:30 - 12:30**		

** Instructor reserves the right to make required changes during the course.