

# ORGANISMAL BIOLOGY

Course Syllabus for BIOL 1306, section 9 (CRN 20928) Spring 2026

## **Instructor**

Dr. Mike Harvey  
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## **Scheduled Class Time and Room**

The class will meet Tuesday and Thursday, 3:00-4:20 p.m. in the Texas Western Hall, room 108.

## **Class expectations and delivery method**

This class is being conducted in-person and you are generally expected to come to class. However, there will be some flexibility in how often you come to class, with the possibility to miss up to 2 weeks of class without penalty.

## **Office Hours**

Office hours are by appointment. Please email me to schedule meetings.

## **Communications**

The best way to reach me is via my UTEP email (see above). I will do my best to respond within 24h M-F.

## **Course Objectives**

Understand how evolution drives: (1) the diversity of life on Earth, (2) ecological interactions among organisms and between organisms and their environments, and (3) the structure and function of organisms.

## **Achieve (Textbook/Homework)**

Instead of a traditional textbook, UTEP is now using the MacMillan Learning Achieve online platform for Principles of Life Digital Update, 3rd Edition. It is software that guides you through various readings and activities that cover concepts and materials in our course. You can either purchase a code at the UTEP bookstore or pay for the Textbook online when you begin the course (must be done using the "ACHIEVE" reading and assignment links in our Blackboard shell). Once purchased you have access for the entire semester.

## **Topical Outline**

- 1) Evolution & Phylogenetics
- 2) Biological Diversity
- 3) Plant structure and function
- 4) Ecology
- 5) Animal structure and function

## **Learning outcomes – Concepts**

- 1) Describe how Darwin convinced the scientific community of the importance of evolution. More broadly, understand how scientific knowledge is generated by achieving consensus among different types of evidence.
- 2) Explain how evolution drives life on Earth at small and large scales.
- 3) Identify major groups of organisms within the tree of life and describe its structure. Be able to reason about the evolutionary history of a group including determination of traits in ancestral lineages.
- 4) Explain the principles of anatomy and physiology in plants and animals.
- 5) Describe how organisms interact with each other and with their environment.

### **Learning outcomes – Skills**

- 1) Gain improved proficiency in reading graphs, interpreting mathematical equations, and interpreting box and arrow diagrams depicting biological phenomena.
- 2) Be able to interpret phylogenetic trees showing relationships among lineages.
- 3) Master ~200 biology vocabulary terms.
- 4) Grow understanding about biological inquiry, both in how scientists apply it, and in how to ask questions about biological knowledge.

### **Grading**

Three types of assignments/activities go into your grade for this course:

#### ***1. Exams (50% of total grade)***

All students will take four in-class, online exams (100 points each). Your lowest score across the four exams will be dropped. Because one exam is dropped, **there are no makeup exams**. Make sure to add the exam dates to your calendar and to come to class on those days! The exams will be closed-book, timed Blackboard exams taken in-class. They will be semi-cumulative, which means they will focus on the material since the last exam but may include some questions that require you to remember earlier material. Make sure to come to class with a working laptop/tablet with the Respondus Lockdown Browser installed (no webcam required). This means you need a functional, fully charged laptop with the software installed or need to check out a laptop from the library for each exam. Further instructions can be found at:

[https://www.utep.edu/technologysupport/Files/docs/BB\\_E-Exams.pdf](https://www.utep.edu/technologysupport/Files/docs/BB_E-Exams.pdf)

#### ***2. Achieve Homework (25% of total grade)***

You will be assigned reading and homework activities to complete through the MacMillan Learning Achieve online platform for Principles of Life Digital Update, 3rd Edition. For all Achieve assignments, **log in to Achieve specifically through our Blackboard course page**. Do NOT save the Achieve link as a “favorite” or otherwise bypass the Blackboard link (if you do, you will not earn a score for your assignment). You need to complete all assigned items for the chapter that are visible in Blackboard (and only those items). These will typically include the reading (all sections in the chapter), an adaptive quiz, and sometimes other items like simulation activities. The exercises are designed to improve the depth of your familiarity with important material. They are not graded on completion rather than performance. You will only receive full credit for the assessments if you complete them by the indicated due date on the course schedule, typically by the night before the next exam (see below). All exercises and due dates are assigned at the beginning of the semester therefore there will be no extensions or late submissions without

a letter of emergency circumstances from the Office of the Dean of Students. There will be no makeups for technical as these are self-paced and you must start them with sufficient time.

### **3. iClicker Participation (25% of total grade)**

Class will be held in room 108 of the Texas Western Hall from 3:00-4:20pm on Tuesday and Thursday. Class will be a mix of lecture and more interactive components such as Q&A, clarification of concepts, discussion of interesting topics or examples, and interactive questions using iClicker. The main way to earn participation points is through in-class answers to the iClicker questions (although other forms of participation may occasionally be used). Each class session is worth the same amount, no matter how many participation questions are asked. Typically, there will be 1-3 iClicker questions per class. You must answer all the questions to get credit for that day (if you leave class early and miss one, you get a zero for that day). Most iClicker questions will be graded on participation, but some may require the correct answer for credit (I will clearly state this when I put up the question). You can miss up to 4 classes with no penalty. **If you are going to miss or did miss a class, please do not email me to inform me of your absence, just do not come to class.** The only exception would be if you miss more than the allowed 4 classes due to an excused reason (religious observances, medical reason), at which time you should reach out to me to discuss possible accommodations.

**Grading Scale:** You will be assigned a letter grade for the course on the following scale: A: 90-100; B: 80-89; C: 70-79; D: 60-69; F: Less than 60. I will round grades to the nearest percentage point, so an 89.5% is an A but an 89.4% is a B.

**Accommodations:** Generally, I assume the policies of this class (lectures posted, due dates and assignments available far in advance, attendance flexibility, etc.) accommodate diverse learning styles, including those of most students with formal accommodations. If you need additional accommodations, you need to both (1) register with CASS (<https://www.utep.edu/student-affairs/cass/>) and (2) reach out to me (either after class or via email) to discuss the specifics of those accommodations as they pertain to our class format.

**Academic dishonesty and AI:** Academic dishonesty will not be tolerated. It includes, but is not limited to, cheating, plagiarism, collusion, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts. If you have any questions regarding the university policy on scholastic dishonesty please contact the Dean of Students. There are no normal writing assignments in this class, so the use of AI for that purpose is not applicable. You are allowed and encouraged to use AI for studying purposes and on homework. You are not allowed to use AI (or any other resource) during the closed-book exams.

**Drop date.** The UTEP Spring 2026 drop deadline is April 2. The College of Science remains aligned with the University and will not approve any drop requests after that date.

## Tentative Schedule of Topics and Assignments

#	Date	Lecture Topic	Achieve Principles of Life Chapters (Due Date)
1	January 20	Syllabus & Introduction	
2	January 22	Evidence for Evolution	
3	January 27	Evidence for Evolution	13: Processes of Evolution (16 Feb)
4	January 29	Microevolution and Macroevolution	15: Evolution of Genes and Genomes (16 Feb)
5	February 3	Microevolution and Macroevolution	16: Speciation (16 Feb)
6	February 5	Microevolution and Macroevolution	14: Reconstructing and Using Phylogenies (16 Feb)
7	February 10	Phylogenetics	17: The History of Life on Earth (16 Feb)
8	February 12	Phylogenetics	
9	February 17	<b>EXAM 1</b>	
10	February 19	Animal Diversity	18: Animal Origins and Diversity (11 Mar)
11	February 24	Animal Diversity	
12	February 26	Animals/Protists	21: The Evolution and Diversity of Fungi (11 Mar)
13	March 3	Fungi	
14	March 5	Bacteria/Origins	18: Bacteria, Archaea, and Viruses (11 Mar)
15	March 10	Origins/Viruses	
16	March 12	<b>EXAM 2</b>	
<b><i>SPRING BREAK, NO CLASSES (March 16-20)</i></b>			
17	March 24	Plant Diversity	20: The Evolution of Plants (15 Apr)
18	March 26	Plant Structure and Function	23: The Plant Body (15 Apr)
19	March 31	Plant Structure and Function	27: Plants in the Environment (15 Apr)
20	April 2	Plant Structure and Function	38: Ecological Systems in Time and Place (15 Apr)
21	April 7	Ecology	
22	April 9	Ecology	40: Interactions within and among Species (15 Apr)
23	April 14	Ecology	
24	April 16	<b>EXAM 3</b>	
25	April 21	Animal Structure and Function	29: Animals in Their Environments (6 May)
26	April 23	Animal Structure and Function	
27	April 28	Animal Structure and Function	37: Animal Behavior (6 May)
28	April 30	Animal Structure and Function	
29	May 5	Conclusion	
	May 7	<b>EXAM 4</b>	