



Syllabus: Concepts of Biology Course Number: BIOL 1409 Semester & Year: master Instructor: Mallory Thompson Email: mthompson@redwaterisd.org

Textbook and Lab Manual Information and Required Reading

<u>Concepts of Biology</u> by OpenStax, ISBN 978-1-938168-11-6, a free textbook available to students at the following website: <u>https://openstaxcollege.org/textbooks/concepts-of-biology</u>

***Print versions also available at the same website.

Student Learning Outcomes for the Course:

1. Describe and define modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.

2. Describe phylogenetic relationships and classification schemes.

3. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.

4. Describe basic animal physiology and homeostasis as maintained by organ systems.

5. Compare different sexual and asexual life cycles noting their adaptive advantages.

6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.

7. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.

8. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.

9. Communicate effectively the results of scientific investigations.

Student Requirements for Completion of the Course: Chapters 21, 11-18

Chapter 21: Conservation and Biodiversity Chapter 11: Evolution and its Processes Chapter 12: Diversity of Life Chapter 13: Diversity of Microbes, Fungi, and Protists Chapter 14: Diversity of Plants Chapter 15: Diversity of Animals Chapter 18: Animal Reproduction and Development Chapter 16: The Body's Systems Chapter 17: The Immune System and Disease

Student Assessment

(1) 4 Lecture Tests

400 points (40%)

(2) 1 Final Exam

- (3) 10 Quizzes
- (4) 4 Essays

(5) Lab Assignments

TOTAL:

Grading Rubric		
Α	89.5% -100%	
В	79.5% - 89.4%	
С	69.5% - 79.4%	
D	60% - 69.4%	
F	59-below	

Lecture and lab tests will mainly cover material presented in the text and lab manual, but may also include extra materials presented by Mrs. Thompson. All tests are based on the 100-point scale. All tests must be taken! If one is missed, it must be taken the next class attended, or a zero will be recorded unless specific plans have been made otherwise. There will be weekly chapter quizzes on Fridays, as designated below in the class schedule. Quizzes are worth 20 points each, and cannot be made up unless they are missed due to an excused absence. Students will also be required to write one

essay per unit (25 pts each), covering the information included in the chapters, intended to help review the material and promote literacy in the classroom.

Class Schedule

Week by week account of topics, exams, due dates. These dates may vary slightly according to class discussions and campus meetings, etc.

Date	Material to be covered	Assignment
Monday 1/5	Go over syllabus	Read Chapter 21
Tuesday 1/6	Chapter 21	
Friday 1/9	QUIZ Chapter 21	Read Chapter 11
WEEK 2	Chapter 11: Sections 1 & 2	
Friday 1/16	Evolution Lab	
WEEK 3	Chapter 11: Sections 3 & 4	
Friday 1/23	QUIZ Chapter 11	Read Chapter 12
WEEK 4	Chapter 12	
Friday 1/30	QUIZ Chapter 12	Study for Exam 1: Chapters 21, 11, & 12
Monday 2/2	EXAM 1: Chapters 21, 11, 12	Read Chapter 13
WEEK 5	Chapter 13	
Friday 2/6	QUIZ Chapter 13	Read chapter 14
WEEK 6	Chapter 14: Sections 1 & 2	
Friday 2/13	Plant Lab	
WEEK 7	Chapter 14: Sections 3 & 4	
Friday 2/20	QUIZ: Chapter 14	Study for Exam 2: Chapters 13- 14
Monday 2/23	EXAM 2: Chapters 13-14	Read Chapter 15
WEEK 8	Chapter 15: Sections 1-3	
Friday 2/27	Animal Lab	
WEEK 9	Chapter 15: Sections 4-6	
Friday 3/6	QUIZ Chapter 15	Read Chapter 18
3/9/15 - 3/13/15	SPRING BREAK	
WEEK 10	Chapter 18	
Friday 3/20	QUIZ Chapter 18	Study for Exam 3: Chapters 15 &

200 points (20%) 200 points (20%) 100 points (10%) <u>100 points (10%)</u> 1000 pts

		18
Monday 3/19	Review for Exam 3	
Tuesday 3/20	EXAM 3: CHAPTERS 15 & 18	Read Chapter 16
WEEK 11	Chapter 16: Sections 1-3	
Monday 3/30	Body System Lab	
WEEK 12	Chapter 16: Sections 4-6	
Tuesday 4/7	QUIZ Chapter 16	Read Chapter 17
WEEK 13	Chapter 17	
WEEK 14	Chapter 17	
Friday 4/17	QUIZ Chapter 17	
Monday 4/20	Review for Exam 4	Study for Exam 4: Chapters 16-
		17
Tuesday 4/21	EXAM 4: Chapters 16 & 17	
Week 14	Labs – Lab QUIZ	
Week 15	Review for Final Exam	
Week 16	FINAL EXAM (1st week of May)	Study ALL chapters covered

Course Overview and Description:

This is a 3 hour course designed for non-science majors, to be taken in conjunction with the lab section, BIOL 1108. The process and method of science applied to understanding biological concepts at the molecular, cellular, organismal and community levels is taught. There is an overview of major groups of organisms with respect to their diversity in organization, processes, interactions and adaptations including human impact upon the environment. The scientific method and social applications of scientific information to related human issues are stressed throughout the course. Students are expected to read the required chapter material prior to lecture time in order to be able to discuss the material and ask appropriate questions.

Absentee Policy

Texarkana College's absentee policy allows instructors to withdraw a student from a course due to excessive absences. If a student leaves and returns during class or leaves the class before the class is over, he/she **may** be considered absent.

Faculty members **are not** obligated to provide opportunities for students to make-up missed assignments and tests as a result of a student's absence from class. Regular attendance enhances academic success. As such, students are expected to attend each meeting of their registered courses.

A student should not stop attending a class without formally withdrawing from the course by the institution's published Last Day for Student to Drop. If a student stops attending class after the published Last Day for Students to Drop, the student **may** receive a grade of "F" in the class. The instructor will submit the last date of attendance for students receiving a grade of "F or "W".

Make-up Policy

All tests must be taken as soon as you return to class or you will receive a zero! The test must be taken during the next class attended, unless specific plans have been made otherwise. THERE WILL BE NO RETAKES ON TESTS!

Academic Integrity Statement

Scholastic dishonesty, involving but not limited to cheating on a test, plagiarism, collusion, or falsification of records will make the student liable for disciplinary action. Proven violations of this nature will result in the

student being dropped from the class with an "F". This policy also applies campus wide, including the TC Testing Center, as well as off-campus classroom or lab sites, including dual credit campuses. This information can be found in the Student Handbook at <u>https://texarkanacollege.edu</u>

Disability Act Statement:

Texarkana College complies with all provisions of the Americans with Disabilities Act and makes reasonable accommodations upon request. Please contact the Recruitment, Advisement and Retention Office in the Administration Building for personal assistance.

Assignment	Your Grade/Possible Points
Quiz Chapter 21	/20
Quiz Chapter 11	/20
Quiz Chapter 12	/20
EXAM 1	/100
Quiz Chapter 13	/20
Quiz Chapter 14	/20
EXAM 2	/100
Quiz Chapter 15	/20
Quiz Chapter 18	/20
EXAM 3	/100
Quiz Chapter 16	/20
Quiz Chapter 17	/20
EXAM 4	/100
FINAL EXAM	/200
Essay 1	/25
Essay 2	/25
Essay 3	/25
Essay 4	/25
Lab Quiz	/20
Lab Assignment 1	/10
Lab Assignment 2	/10
Lab Assignment 3	/10
Lab Assignment 4	/10
Lab Assignment 5	/10
Lab Assignment 6	/10
Lab Assignment 7	/10
Lab Assignment 8	/10
Lab Assignment 9	/10
Lab Assignment 10	/10
TOTAL:	/1000

TOTAL: ____

____/1000