University of North Texas at Dallas
Fall 2025
SYLLABUS

BIOL 1082: Biology for Educators 3 Hrs and Lab 2 Hrs

Department of	**Natural**	**Sciences**	**Division of**	**Liberal Arts and Sciences**

Instructor Name:	Dr. Jessica Guerrero
Office Location:	NA
Office Phone:	NA
Email Address:	jessica.guerrero@untdallas.edu
Office Hours:	**By Appointment Only**
Classroom Location:	Lecture FH 337 Lab FH 256
Class Meeting Days & Times:	**MW 10:00am-11:20am W 11:30am-2:20pm**
Course Catalog Description:	Develop a meaningful and functional command of key biological concepts; an understanding of the interrelationships among all living things; and a correlation between what preservice teachers are required to learn and what they will be required to teach. Includes laboratory. BIOL 1082 is a general biology course with laboratory designated for elementary and middle school education majors for seeking teacher certification. **Note: this course may not be used to satisfy the laboratory science requirement for majors in the College of Arts and Sciences.**
Prerequisites:	None
Co-requisites:	BIOL 1082 Laboratory
Required Text:	Modified Mastering Biology with Pearson eText -- Standalone Access Card -- for The Biology: Life on Earth with Physiology. Edition: 12th. ISBN: 9780135443859. Author: Audesirk
Recommended Text and References:	None
Access to Learning Resources:	UNT Dallas Library: phone: (972) 338-1616; web:http://www.untdallas.edu/ourcampus/library UNT Dallas Bookstore: phone: (972) 780-3652; e-mail: 1012mgr@fheg.follett.com

Supported Browsers:	**Getting Help with Canvas:**
Chrome 67 & 68 Firefox 60 & 61 Flash 29, 30 (for audio/video) Respondus Lockdown Browser Safari 10, 11 **Supported Devices:** iPhone Android Chromebook *(Tablet users can use the Canvas app)* **Screen Readers:** VoiceOver (Safari) JAWS (Internet Explorer) NVDA (Firefox) *Note: There is no screen reader support for Canvas in Chrome*	**Canvas 24/7 Phone Support for Students: 1-833-668-8634** **Canvas Help Resources:** **Web:** Canvas Student Guide **For additional assistance, contact Student Assistance** **(Distance Learning):** Founders Hall, Rm 124 phone: (972)338-5580 email: distancelearning@untdallas.edu ***If you are working with Canvas 24/7 Support to resolve a technical issue, make sure to keep me updated on the troubleshooting progress.*** ***If you have a course-related issue (course content, assignment troubles, quiz difficulties) please contact me during office hours or by email.***

Course Goals or Overview:	
	The goal of this course is to provide the student with a broad background in biology that can be used in elementary and secondary education. This course will provide a brief overview of the major topics within the biological sciences.

Learning Objectives/Outcomes:	At the end of this course, the student will
1	Be able to locate, evaluate, and organize information including the use of information technologies
2	Cultivate intellectual curiosity and self-responsibility, building a foundation for lifelong learning
3	Engage with a variety of others in thoughtful and well-crafted communication
4	Develop problem solving skills that incorporate multiple viewpoints and differing contexts in their analysis

Course Outline

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in class.

TOPICS	TIMELINE	Other
Introduction to Class, An Introduction to Life on Earth (Ch.1)	Week 1	
Molecules and Water, Biological Molecules (Ch. 2 and 3)	Week 2	
Biological Molecules (Ch. 3)	Week 3	
Test 1	Week 4	
Cell and Cell Membrane (Ch. 4 and 5)	Week 5	
Cell Division: Mitosis and Meiosis, Pattern of Inheritance (Ch. 9, 10, 11)	Week 6	
Energy and Enzymes, Photosynthesis (Ch. 6 & 7)	Week 7	
Test 2	Week 8	
Spring Break	Week 9	
Cellular Respiration and Fermentation (Ch. 8)	Week 10	
DNA and DNA replication, Gene Expression (Ch. 12 and 13)	Week 11	
Gene Expression, Origin of Species (Ch. 13 and 17)	Week 12	
Test 3	Week 13	
How Populations Evolve, Community Interactions (Ch. 16 and 28)	Week 14	
Energy Flow and Nutrient Cycling in Ecosystems (Ch. 29)	Week 15	
Homeostasis and Organization of the Animal Body (Ch. 32)	Week 16	
FINAL EXAM	**Week 16**	

Course Evaluation Methods

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course.

Four Exams and Two Lab Exams
Chapter Homework – *assignments in Pearson*

Grading Matrix:

Instrument	Value (points or percentages)	Total
Exams	4 exams @ 100 pts ea	400
MasteringBiology Homework	Various TBD	180
Exam Building Exercises	4 x 25 pts	100
Application Lesson Design	4 x 25 pts	100
Laboratory Assignments	11 x 10 points	110
Lab Presentations	50 points 100 points	150
Lab Exams	2 x 50 points	100
Total:		**1140**

Grade Determination will use the following guidelines:
A = 90% or more
B = 80-89%
C = 70-79%
D = 60-69%
F = less than 60%

***Note: Attendance will be taken regularly and students must attend 66% of all lectures in order to pass the course, regardless of their letter grade in the course.**

University Policies and Procedures

Statement on Artificial Intelligence: UNT Dallas acknowledges the evolving capabilities of Artificial Intelligence (AI) technologies and their various effects on student writing and content creation. The Department of Natural Sciences takes a use-with-permission approach to AI.

Students are only permitted to use AI technology in the creation of any course content if permitted by the course instructor. If the use of AI technology is detected, without specific instructor permission, the student will be deemed in violation of the plagiarism policy.

Students with Disabilities (ADA Compliance): The University of North Texas at Dallas makes reasonable academic accommodation for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see the Disability Services Office website at https://www.untdallas.edu/disability. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu or at Founders Hall, room 204. (UNTD Policy 7.004)

CoursEval Policy: Student's evaluations of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you a chance to comment on how this class is taught. I am very interested in the feedback I get from students, as I work to continually improve my teaching. I consider students' evaluations to be an important part of your participation in this class.

Assignment Policy: According to the instructor's discretion while working in concert with the division/program's guidelines).

Exam Policy: Exams should be taken as scheduled. No makeup exams will be allowed except for documented emergencies (See Student Handbook).

Academic Integrity: Academic integrity is a hallmark of higher education. You are expected to abide by the University's code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to the Student Code of Academic Integrity (Policy 7.002) at https://www.untdallas.edu/sites/default/files/page_level2/pdf/policy/7.002%20Code%20of%20Academic_Integrity.pdf Refer to the Student Code of Student Rights, Responsibilities and Conduct at https://www.untdallas.edu/sites/default/files/page_level2/hds0041/pdf/7_001_student_code_of_conduct_may_2014.pdf Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students. In addition, all academic work turned in for this class, including exams, papers and written assignments must include the following statement: "*On my honor, I have not given, nor received, nor witnessed any unauthorized assistance that violates the UNTD Academic Integrity Policy*."

Bad Weather Policy: Campus facilities will close and operations will be suspended when adverse weather and/or safety hazards exist on the UNTD campus or if travel to the campus is deemed dangerous as the result of ice, sleet or snow. In the event of a campus closure, the Marketing and Communication Department will report closure information to all appropriate major media by 7 a.m. That department will also update the UNTD website, Facebook and Twitter with closing information as soon as it is possible. For more information please refer to http://www.untdallas.edu/police/resources/notifications

Attendance and Participation Policy:
The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at http://www.untdallas.edu/hr/upol

Diversity/Tolerance Policy: Students are encouraged to contribute their perspectives and insights to class discussions. However, offensive and inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions which violate the Code of Student Conduct will be referred to the Dean of Students as the instructor deems appropriate. (UNTD Policy 7.001)

LAB SCHEDULE

Week	Date	Activities
1	8/27	Classes Begin; NO LABS
2	9/3	Lab Introduction and Lab Safety Effective Teamwork Scientific Measurement and the Metric System
3	9/10	Introduction to Semester Projects Biomolecule Chart Construction Activity DNA Extraction from Strawberries
4	9/17	Introduction to Cell Presentations
5	9/24	Cells and the Microscope Organelle Chart Research
6	10/1	Mitosis and Meiosis: Chromosome Modeling
7	10/8	Meiosis and Genetics: Building a Bee-bop
8	10/15	Lab Exam 1- Cell Presentations
9	10/22	Introduction to Human Systems and Disease Photosynthesis (diagram)
10	10/29	Respiration (include diagrams)
11	11/5	Build a Model of DNA (Kinex)- Focus on Replication Steps (diagram)
12	11/12	Protein Synthesis- MILKSHAKE Activity
13	11/19	Evolution and Natural Selection: Beaks of Finches
14	11/26	Remote- Nutrient Cycle Video Presentation Remote- Submit Human System and Disease Project
15	12/3	Lab Exam 2- Semester Poster Project Presentations
16	12/10	Finals Week; NO LABS