

Course Overview	Biotechnology I is an introductory course designed to provide students with a foundational understanding of the science and scientific practices in the field. Students will learn how biological characteristics in one organism can be used to advance another. Through a combination of theoretical concepts and hands-on laboratory experiences, students will explore the fundamental principles and techniques used in modern biotechnology. This course aims to develop students' scientific inquiry skills, critical thinking abilities, and ethical considerations in the field of biotechnology.
Course Standards	Biotechnology I TEKS (One Credit), Adopted 2021

Scope & Sequence

Units/Modules & Instructional Days	Assessments & Scanning Deadlines	Standards
<i>Teacher Incentive Allotment (TIA) Pre-Test</i>	TX_CTE_9thBiotechnology1_F26_PreTest Scanning Deadline: September 3, 2026	Unit Standards Alignment
Unit 1: Introduction to Biotechnology 15 Days	TX_CTE_9thBiotechnology1_F26_UE1 Scanning Deadline: September 17, 2026	
Unit 2: Basic Human Biological Concepts 17 Days	TX_CTE_9thBiotechnology1_F26_UE2 Scanning Deadline: October 8, 2026	
Unit 3: Bacterial Isolation 17 Days	TX_CTE_9thBiotechnology1_F26_UE3 Scanning Deadline: November 5, 2026	
Unit 4: Introduction to Microbiology 10 Days	TX_CTE_9thBiotechnology1_F26_UE4 Scanning Deadline: November 19, 2026	
Unit 5: Major Microbial Infections 8 Days	No Unit Exam 5	
Unit 6: Upstream Biotechnology 13 Days	TX_CTE_9thBiotechnology1_S27_UE6 Scanning Deadline: January 28, 2027	
Unit 7: Genetic Engineering 7 Days	TX_CTE_9thBiotechnology1_S27_UE7 Scanning Deadline: February 9, 2027	
Unit 8: Nature of Science & Bioethics 12 Days	TX_CTE_9thBiotechnology1_S27_UE8 Scanning Deadline: March 4, 2027	
Unit 9: Applications of Biotechnology Continued 13 Days	TX_CTE_9thBiotechnology1_S27_UE9 Scanning Deadline: March 25, 2027	
Unit 10: Final Project & Final Exam 19 Days	TX_CTE_9thBiotechnology1_S27_UE10 Scanning Deadline: April 22, 2027	

Semester Exam Window: December 7-18, 2026		
AUS	TX_CTE_9thBiotechnology1_S26_SE Scanning Deadline:	TBD
RGV	TX_CTE_9thBiotechnology1_S26_SE Scanning Deadline:	
SANT	TX_CTE_9thBiotechnology1_S26_SE Scanning Deadline:	
DFW	TX_CTE_9thBiotechnology1_S26_SE Scanning Deadline:	
PERM	TX_CTE_9thBiotechnology1_S26_SE Scanning Deadline:	
Final Exam/TIA Post Test Window: May X-X, 2027		
AUS	TX_CTE_9thBiotechnology1_S27_FE Scanning Deadline:	TBD
RGV	TX_CTE_9thBiotechnology1_S27_FE Scanning Deadline:	
SANT	TX_CTE_9thBiotechnology1_S27_FE Scanning Deadline:	
DFW	TX_CTE_9thBiotechnology1_S27_FE Scanning Deadline:	
PERM	TX_CTE_9thBiotechnology1_S27_FE Scanning Deadline:	

TEKS Alignment

Instruction in this course is aligned to the Texas Essential Knowledge and Skills (TEKS) as adopted by the State Board of Education and implemented in accordance with Texas Education Code Chapter 28.

Instructional Materials

Primary Texts (if applicable)

Supplemental instructional materials may be used to support instruction. Supplemental materials do not replace board-approved core instructional materials.

Additional information regarding instructional programs, assessments, and parent access to instructional materials is available on the district website.

Instructional Expectations

Instruction is delivered using board-approved instructional materials and aligned to the scope and sequence outlined above. Teachers are expected to ensure all required standards are taught within the course timeframe.

Assessment Overview

Student learning is monitored through formative and summative assessments aligned to course standards. Assessment results are used to inform instruction and student supports. Students participate in required state assessments when applicable.