

Course Overview	Biotechnology II is an advanced course that builds upon the foundational skills acquired in Biotechnology I. Students will delve into advanced molecular biology techniques, protein purification methods, cell culture techniques, and perform various assays. Through hands-on laboratory exercises, students will gain proficiency in techniques and will be introduced to bioinformatics tools for data analysis. By the end of the course, students will have developed a comprehensive understanding of advanced biotechnology concepts and techniques, equipping them for further research or careers in the field
Course Standards	Biotechnology II 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_10thBiotechnology2_F26_PreTest Scanning Deadline: September 25, 2026	Unit Standards Alignment
Unit 1: Introduction to Biotechnology 15 Days	TX_CTE_10thBiotechnology2_F26_UE1 Scanning Deadline: September 10, 2026	
Unit 2: Basic Human Biological Concepts 17 Days	TX_CTE_10thBiotechnology2_F26_UE2 Scanning Deadline: October 1, 2026	
Unit 3: Bacterial Isolation 17 Days	TX_CTE_10thBiotechnology2_F26_UE3 Scanning Deadline: October 23, 2026	
Unit 4: Introduction to Microbiology 10 Days	TX_CTE_10thBiotechnology2_F26_UE4 Scanning Deadline: November 5, 2026	
Unit 5: Major Microbial Infections 8 Days	No Unit Exam 5	
Unit 6: Upstream Biotechnology 13 Days	TX_CTE_10thBiotechnology2_S27_UE6 Scanning Deadline: January 28, 2027	
Unit 7: Genetic Engineering 7 Days	TX_CTE_10thBiotechnology2_S27_UE7 Scanning Deadline: February 11, 2027	
Unit 8: Nature of Science & Bioethics 12 Days	TX_CTE_10thBiotechnology2_S27_UE8 Scanning Deadline: February 25, 2027	
Unit 9: Applications of Biotechnology Continued 13 Days	TX_CTE_10thBiotechnology2_S27_UE9 Scanning Deadline: March 25, 2027	
Unit 10: Final Project & Final Exam 19 Days	TX_CTE_10thBiotechnology2_S27_UE10 Scanning Deadline: April 22, 2027	

Semester Exam Window: December 7-18, 2026		
AUS	TX_CTE_10thBiotechnology2_S26_SE Scanning Deadline:	TBD
RGV	TX_CTE_10thBiotechnology2_S26_SE Scanning Deadline:	
SANT	TX_CTE_10thBiotechnology2_S26_SE Scanning Deadline:	
Final Exam/TIA Post Test Window: May TBD, 2027		
AUS	TX_CTE_10thBiotechnology2_S27_FE Scanning Deadline:	TBD
RGV	TX_CTE_10thBiotechnology2_S27_FE Scanning Deadline:	
SANT	TX_CTE_10thBiotechnology2_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.