

Course Overview	Medical Microbiology provides students with hands-on laboratory experience to explore microbial structure, metabolism, genetics, and pathogenicity. Throughout the course, students will master essential lab techniques such as aseptic handling, Gram staining, biochemical testing, and molecular diagnostics. The course culminates in a capstone project where students apply their skills to identify an unknown bacterial sample using a series of diagnostic tests, simulating real-world clinical and research applications.
Course Standards	<u>Medical Microbiology TEKS (One Credit), Adopted 2021</u>

Scope & Sequence

Units/Modules & Instructional Days	Assessments & Scanning Deadlines	Standards
Unit 1: Introduction to Microbiology & Laboratory Safety 13 days	TX_CTE_11thM_Microbiology_F26_UE1 Scanning Deadline: September 10, 2026	<u>Unit Standards Alignment</u>
Teacher Incentive Allotment (TIA)/ Pre-Test	TX_CTE_11thM_Microbiology_F26_PreTest Scanning Deadline: September 14, 2026	
Unit 2: Microbial Growth, Isolation & Culturing Techniques 17 days	TX_CTE_11thM_Microbiology_F26_UE2 Scanning Deadline: October 8, 2026	
Unit 3: Bacterial Staining with Microscopy Techniques 12 Days	TX_CTE_11thM_Microbiology_F26_UE3 Scanning Deadline: October 29, 2026	
Unit 4: Microbial Isolation via Selective & Differential Media 13 Days	TX_CTE_11thM_Microbiology_F26_UE4 Scanning Deadline: November 19, 2026	
Unit 5: Bacterial Metabolism & Biochemical Testing 9 Days	No Unit Exam 5	
Unit 6: Microbial Genetics & Molecular Techniques 13 Days	TX_CTE_11thM_Microbiology_S27_UE6 Scanning Deadline: January 28, 2027	
Unit 7: Microbial Pathogenesis & Host Interactions of Medically Important Bacteria 11 Days	TX_CTE_11thM_Microbiology_S27_UE7 Scanning Deadline: February 18, 2027	
Unit 8: Biomedical Research & Professional Readiness 12 Days	TX_CTE_11thM_Microbiology_S27_UE8 Scanning Deadline: March 4, 2027	

Unit 9: Capstone Project– Part I 10 Days	TX_CTE_11thM_Microbiology_S27_UE9 Scanning Deadline: March 25, 2027	
Unit 10: Capstone Project– Part II 17 Days	TX_CTE_11thM_Microbiology_S27_UE10 Scanning Deadline: April 22, 2027	
Semester Exam Window: December 7 - 18, 2026 Scanning Deadline: December 18, 2026		
AUS	TX_CTE_11thM_Microbiology_S27_SE Scanning Deadline:	TBD
RGV	TX_CTE_11thM_Microbiology_S27_SE Scanning Deadline:	
SANT	TX_CTE_11thM_Microbiology_S27_SE Scanning Deadline:	
Final Exam: May TBD, 2027		
AUS	TX_CTE_11thM_Microbiology_S27_FE Scanning Deadline:	TBD
RGV	TX_CTE_11thM_Microbiology_S27_FE Scanning Deadline:	
SANT	TX_CTE_11thM_Microbiology_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.