

Biology Syllabus 2026-2027

Course Description

Biology is a laboratory-based course that explores the structures, processes, and systems of living organisms. Students will investigate cell functions, genetics, evolution, ecological relationships, and biological systems. Emphasis is placed on scientific inquiry, real-world application, and **STAAR Biology readiness**.

Curriculum Overview

The following table outlines the instructional units, approximate timeframes, and specific TEKS (Texas Essential Knowledge and Skills) for the 2026-2027 school year based on the district scope and sequence. **Readiness TEKS (R)** are priority standards, while **Supporting TEKS (S)** provide foundational context.

Unit	Unit Name	Approx. Days	Readiness TEKS	Supporting TEKS
1	Cells & Cellular Processes: Structures and functions	20	B.5A-D*	N/A
2	Cell Growth & Differentiation: Cell cycle and specialized cells	14	B.6C	B.6A, B.6B (S)
3	Nucleic Acid & Gene Expression: DNA and protein synthesis	14	B.7C	B.7A, B.7B (S), B.7D (NT)**
4	Inheritance: Mendelian and non-Mendelian genetics	11	B.8A, B.8B*	N/A
5	Speciation & Common Ancestry: Fossil record and evolution	6	B.9B	B.9A (S)

6	Biological Evolution: Natural selection and genetic drift	8	B.10B, B.10C	B.10A, B.10D (S)
7	Matter & Energy: Photosynthesis and cellular respiration	10	B.11A, B.11B*	N/A
8	Organisms: Plant and animal systems interactions	5	B.12B	B.12A (S)
9	Environmental Interdependence: Ecosystem stability and cycles	8	B.13D	B.13A, B.13B, B.13C (S)
Review	STAAR Review: Targeted mastery and spiral review	TBD	Differentiated	N/A

***Note:** Standards for Units 1, 4, and 7 are identified as core focuses for those units, though specific R/S designations were not explicitly labeled in the summary table of the scope document.*
***NT indicates Non-Tested standards; S indicates Supporting standards where explicitly marked.*

Skills & Standards

Throughout the year, students will develop the following competencies:

- **Investigate** cell structure, function, and division.
- **Analyze** DNA, RNA, and protein synthesis.
- **Predict** genetic outcomes using Punnett squares and pedigrees.
- **Evaluate** evidence of evolution and common ancestry.
- **Explain** principles of natural selection and biodiversity.
- **Model** energy transformations and matter cycling in living systems.
- **Explore** body systems and organism-level interactions.
- **Analyze** ecological relationships and environmental stability.
- **Design and conduct** scientific investigations using proper laboratory techniques.
- **Prepare** for the Biology STAAR EOC through rigorous content mastery.

Grading

Please refer to the **Forney ISD Grading Guidelines** for detailed expectations regarding assignments, assessments, late work policies, and opportunities for reassessment