CFISD Mathematical Models with Application

Scope and Sequence (2025–2026)

Course Description

Mathematical Models with Applications is designed to build on the knowledge and skills for mathematics. It provides a path for students to succeed in Algebra II and prepares them for various post-secondary choices. Students learn to apply mathematics through experiences in personal finance, science, engineering, fine arts, and social sciences. Students use algebraic, graphical, and geometric reasoning to recognize patterns and structures, model information, solve problems, and communicate solutions. Students will select from tools such as physical objects; manipulatives; technology, including graphing calculators, data collection devices, and computers; paper and pencil, and methods such as algebraic techniques, geometric reasoning, patterns, and mental math to solve problems.

Texas Essential Knowledge and Skills: Mathematical Models with Application

First Semester (81 Days)

1st Grading Period

Unit	Start Date	End Date
Mathematical Modeling in the Social Science	Aug. 13, 2025	Oct. 1, 2025
Mathematical Modeling in Science and Engineering	Oct. 2, 2025	Oct. 9, 2025

2nd Grading Period

Unit	Start Date	End Date
* Mathematical Modeling in Science and Engineering	Oct. 15, 2025	Dec. 18, 2025

Last updated: May 15, 2025

Second Semester (92 Days)

3rd Grading Period

Unit	Start Date	End Date
Mathematical Modeling in Fine Arts	Jan. 6, 2026	Feb. 27, 2026
Mathematical Modeling in Personal Finance	Feb. 27, 2026	Mar. 6, 2026

4th Grading Period

Unit	Start Date	End Date
* Mathematical Modeling in Personal Finance	Mar. 16, 2026	May 28, 2026

Notes

* Includes time for Final Exams.

**The length of each unit is a specific number of days, but it is understood that there is a range of +/- a day. The purpose of the flexibility is meant to allow teachers the opportunity to plan for the needs of their students and to accommodate re-teaching or review when necessary. If pre-assessment indicates student mastery could be obtained in a fewer number of days, the additional time could be used for extension or carried into the next unit.

Instructional Materials

Mathematical Models with Applications, Texas Edition

Pearson