

# CFISD Advanced Placement Chemistry

Scope and Sequence 2024-2025

## Course Description:

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry-based investigations, as they explore the science content. The course is designed to enable students to view chemical phenomena through a variety of conceptual lenses and at various levels: macroscopic, microscopic, sub-microscopic, and symbolic. AP Chemistry is equivalent to a college-level general chemistry course.

## College Board Advanced Placement Standards: AP Chemistry

| Instructional Units                             | Days** | Start Dates | End Dates  |
|---|--------|-------------|------------|
| First Semester                                  | 81     | 8/19/2024   | 12/20/2024 |
| <b>1st Grading Period (8/19/24 - 10/18/24)</b>  |        |             |            |
| Unit 1: Atomic Structures and Properties        | 14     | 8/19/2024   | 9/6/2024   |
| Unit 2: Compound Structure and Properties       | 14     | 9/9/2024    | 9/26/2024  |
| <b>2nd Grading Period (10/21/24 - 12/20/24)</b> |        |             |            |
| Unit 3: Properties of Substances and Mixtures   | 16     | 9/27/2024   | 10/21/2024 |
| Unit 4: Chemical Reactions                      | 16     | 10/22/2024  | 11/14/2024 |
| Unit 5: Thermochemistry                         | 21     | 11/15/2024  | 12/20/2024 |
| Second Semester                                 | 92     | 1/7/2025    | 5/29/2025  |
| <b>3rd Grading Period (1/7/25 - 3/7/25)</b>     |        |             |            |
| Unit 6: Kinetics                                | 15     | 1/7/2025    | 1/28/2025  |
| Unit 7: Equilibrium                             | 17     | 1/29/2025   | 2/24/2025  |
| <b>4th Grading Period (3/17/25 - 5/29/25)</b>   |        |             |            |
| Unit 8: Acids and Bases                         | 18     | 2/25/2025   | 3/27/2025  |
| Unit 9: Thermodynamics & Electrochemistry       | 14     | 3/28/2025   | 4/16/2025  |
| AP Exam: Review & Administration                | 12     | 4/17/2025   | 5/6/2025   |
| Open  | 16     | 5/7/2025    | 5/29/2025  |

\*\* The length of each unit is a specific number of days, but it is understood that there is a range of +/- two days. 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:

Tro, Nivaldo J. Chemistry: A Molecular Approach, 5th Edition,  
Upper Saddle River, NJ, Prentice Hall, 2019

