10th Grade Chemistry
2026-2027
Instructional Plan

Created on August 7, 2026

Contact Information

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WHAT IS PRE-AP?

Pre-AP features grade-level instruction intended to give all students the opportunity for growth. It offers a focused framework, instructional support, model lessons, and classroom assessments while focusing on skills that students will need to succeed in AP courses, college, and careers.

Shared principles:

- Close Observation and Analysis: Students carefully observe a data set, text, image, or problem--capturing relevant details before attempting to explain, analyze, or evaluate. ● Evidence-Based Writing: Students learn to craft precise sentences before progressing to longer forms of writing—applying these skills as they craft claims, develop arguments, and provide explanations.
- Higher-Order Questioning: Students engage with questions that are elevated beyond simple recall as they make predictions, synthesize, evaluate, and compare--learning that deep questions lead to deeper understanding.
- Academic Conversation: Students become active participants in their own learning through frequent opportunities to compare, critique, debate, and build upon others' ideas--recognizing that all voices, including their own, deserve to be heard.

COURSE DESCRIPTION

Pre-AP Chemistry is a rigorous, inquiry-based course designed to introduce students to the fundamental principles of chemistry while building the critical thinking, data analysis, and lab skills needed for success in future AP science courses and college-level coursework.

Through engaging investigations, students explore matter and its interactions, chemical reactions, atomic structure, periodicity, bonding, and energy transformations. Emphasis is placed on scientific reasoning, modeling, data interpretation, and the application of math in a chemical context.

This course supports vertical alignment with AP Chemistry and other advanced science courses by reinforcing college readiness skills and deep conceptual understanding.

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COURSE ACTIVITIES

Below you will find descriptions of the most common activities that students will participate in following units during the course of each semester:

- Note taking
- Assessments-formal, informal, performance tasks

The following laboratory activities:

- Finding out the densities of various objects of different materials.
- Calorimetry Experiments.
- Gas Laws experiments.
- Solving stoichiometry problems.

GRADES - Click here for → YWLA Grading Policy

Major (Test, Projects, Writing) 60%
Minor (Notes, Daily Work) 40%

Classroom Resources

- Pre-AP Chemistry Student Resources
- Pre-AP Chemistry Teacher Resources
- Google Classroom
- Videos on Youtube
- PhET Simulations

COURSE OBJECTIVES AND TOPICS

- Structure and Properties of Matter
- Chemical Bonding and Interactions
- Chemical Quantities
- Chemical Transformations

Optional Materials/Resources

Periodic tables
Teacher- made charts and models.

Please feel free to reach out with any questions or concerns. We are excited to work together to make this a successful year of learning!