

### Course Introduction

Welcome to AP Chemistry. The choice of taking an AP course, particularly Chemistry means that you have a deep thirst for understanding. This AP Chemistry course is very fast paced and will use digital resources. The college board requires that 25% of our course be Inquiry based. Therefore, we will pursue inquiry activities in various forms.

### Course Description

This AP Chemistry course is designed to be a second year high school course, equivalent to the first year of college Chemistry. We will explore quantitative analysis as well as general Chemical principles such as stoichiometry, acid-base chemistry, and rate laws. This is a fast paced course with required reading and independent practice requirements. The labs are designed as hands-on inquiry based investigations and will be carried out on the main campus. This course will prepare you for the AP Chemistry exam offered by the College Board.

This is a yearlong course consisting of 14 units. Upon successful completion students will receive 1 credit towards high school graduation.

### Course Prerequisites

Successful completion of high school Chemistry and Algebra 2

### Course Overview

#### Semester 1

- General Chemistry and Mathematics
- The Atom, Periodic Table and Nomenclature
- The Mole, Molar Mass, and Stoichiometry
- Solution Chemistry
- Gases
- Thermochemistry
- Atomic Structure and Periodicity
- Bonding

#### Semester 2

- Liquids, Solids, and Solutions
- Chemical Equilibrium
- Acids and Bases
- Reaction Kinetics

- Electrochemistry
- AP Chemistry Exam Prep

## Required Course Materials

Please access the list of course materials from the OC Online book ordering system and order your materials as soon as possible. Oftentimes, course materials are on back order and you may experience a delay in receiving them, causing students to fall behind in their online coursework. When ordering used or rented materials, be careful that online access codes are also current.

## Methods of Evaluation

Objectives for each unit and AP Investigation will be included in the introduction for each. You will be assessed with laboratory reports, presentations, written papers, discussion threads, interaction during live sessions, and written quizzes and tests.

## Grading Policy

Students will demonstrate mastery through the following formative and summative assessments:

- 40% Assignments
- 10% Participation (Discussion Posts, Synchronous Sessions)
- 10% Quizzes
- 25% Final Exam
- 15% Unit Tests