



### AP Chemistry Curriculum

**Course Description:** This course is designed for 11th and 12th grade students who have an interest in learning college-level inorganic chemistry. Students should excel in both math and science and be excellent problem solvers. Chemistry is both a quantitative and laboratory science that deals with the interactions of matter and the changes matter undergoes. This course is designed to prepare students for the AP chemistry test given in May..

**Course Expectations:** This course is offered for two semesters and students attend class for one block each day. Students will read their textbooks and review their notes independently, as well as complete homework assignments every night. Quizzes and tests are given for each unit. Pre lab quizzes and formal laboratory reports will be written for all experiments conducted. Projects and current event articles will also be assigned. This course does have summer work.

#### Units Covered:

- Limiting Reactants, Percent Yield, and Combustion Analysis
- Aqueous Reactions and Solution Stoichiometry
- Electronic Structure of Atoms
- Periodic Properties of the Elements
- Basic Concepts of Chemical Bonding
- Molecular Geometry and Bonding Theory
- Gases
- Intermolecular Forces and Liquids
- Properties of Solutions
- Chemical Kinetics
- Chemical Equilibrium
- Acid-Base Equilibria
- Additional Aspects of Aqueous Equilibria
- Thermodynamics
- Chemical Thermodynamics
- Electrochemistry