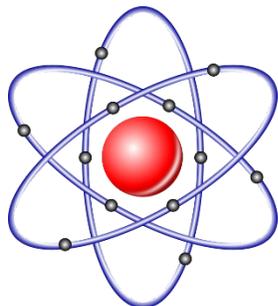


AP Course Overview



AP Chemistry is an upper-level college preparatory course geared to cover Chemistry 1 concepts in greater depth as-well-as expand into a broader knowledge base of chemistry, often referred to as the “central science”. Just as with Chemistry 1, students will continue to develop their problem-solving skills by working throughout the year on a combination of lab exercises, written assignments, lecture note-taking, and an emphasis on problem sets. A textbook (Zumdahl, AP Edition) will be used in this course and each student will be responsible for maintaining a course notebook and laboratory notebook.

Quarter 1

Chapter #1-3

Review: (Summer Homework) – Matter, atoms, stoichiometry (moles)
(Nomenclature, Units of measure, Atomic Theory)

Chapter #4

Types of reactions

Reaction Stoichiometry (ICE)

Chapter #8

Quantum mechanical model of the atom:

Bonding, VSPER, Hybridization

Quarter 2

Chapter #6 (16.1 & 16.7)

Thermodynamics/Thermochemistry

Chapter #12

Kinetics

Chapter #13

Equilibrium (Conc. Gaseous)

Quarter 3 & Quarter 4

Chapter #14 & #15

Acid/Base Equilibrium

Titration, Buffers, K_{sp}

Chapter #16.6 and #17

Electrochemistry

Chapter #5, Chapter #10 & #11

Solids, liquids & Gases

Solutions

Chapter #7

(electron configurations, trends of the periodic table, PES)

****AP exam : May 6, 2024**

Organic Chemistry:

Synthesis of Aspirin, IR and NMR Analysis

Escape Room

