

AP Chemistry

2021-2022

Course description

This course is designed to be comparable to a college-level general chemistry course. Successful completion of this course and the AP Examination may fulfill the college requirement for freshman chemistry and the associated lab. Students taking this course will be substantially better prepared for any college science course due to the intensive nature of study required by the content covered, the math involved, the use of higher-level thinking skills, and the more involved laboratory experience. Major topics covered will include the structure of matter, states of matter, chemical reactions, kinetics, thermochemistry, equilibrium, acid-base, and electrochemistry. Students will gain problem solving and reasoning skills through the context of chemistry. A portion of the course time will consist of participation in laboratory activities that are aligned with the AP Course Description.

Recommended previous courses

Pre AP Chem
Algebra II

Materials Needed

3" 3 ring binder
Scientific Calculator
*Personal Safety Goggles

Supplemental Materials

A Review Book is highly recommended. Purchase this at the beginning of the year as these are a tremendous resource.

Course fees:

\$100.00 (From this course fee \$94.00 pays for the AP exam and \$6.00 goes towards lab fees)

Expectations:

You need to be in class, on time every day in order to perform well in this course. The policy in your student handbook will be followed. You will have no longer than 3 days following an excused absence to complete makeup work or missed labs in order to receive credit. The best policy for success is to be in class! It is the students' responsibility to follow up on missed assignments, not the teacher's. **RESPECT, RESPONSIBILITY and MATURITY** will guide all of our classroom behavior. The intensity of this course and the associated labs will require a higher level of maturity and seriousness than a typical high school class. Disruptions and immature behavior are unacceptable and may result in your removal from this class.

Mr. McQueen

mmcqueen@enterpriseschools.net • 334.347.2640 • 3rd Block Planning

Unit Zero

Review

- Stoichiometry
- Dimensional Analysis
- Nomenclature
- Basic Calculations

Unit 1

Atomic Structure

- Electron Configuration
- Periodic Trends
- Light and Energy
- PES

Unit 2

Bonding

- IMF
- Molecular Geometry
- Spectroscopy
- VSEPR

Unit 3

States of Matter

- KMT
- Gas laws
- Liquids and Solids

Unit 4

Chemical Reactions

- Redox
- Acid-Base
- Precipitation Reactions

Policies

- **Cell phones and other devices** should only be used for academic purposes. This is a college level course and you will be expected to manage your time and attention wisely.
- **Attendance:** We will follow board policy as outlined in the handbook. Only 70% credit will be given to missed assignments with an unexcused absence. Attendance is directly correlated to success in this class.
- **Make-Up work:** It is the **student's** responsibility to get missed work and have turned in within the allotted time frame. Missing an assessment will result in an alternative assessment.
- **Academic Dishonesty:** Any academic dishonesty will result in a zero on the assignment and a referral to the office for documentation purposes.

Homework

- Reading assignments, videos, and practice problems will be assigned almost daily.
- Homework is not graded. The purpose of homework is to develop the skills necessary to be successful in chemistry.

Grade Distribution

- 70% Formal Grades
 - Test
- 30% Labs/In-Class Assignments
 - Lab Reports/Quiz

Safety

- Safety is an essential component of any chemistry course. Students will be held to a high safety standard. If a student violates lab safety protocol, depending on the severity of the offense, they may be removed from the lab and receive a 0 on the assignment.

Review Sessions

Every Tuesday and Thursday from 3:30-4:30

Mock Exam March 12 or 19th depending on prom date

Parent Conferences:

Conferences can be scheduled through the guidance office. To make an appointment please call the front office and they will connect you to the guidance staff.

I am always available by email for any questions or concerns: mmcqueen@enterpriseschools.net

Digital Information:

- We will use Schoology in place of google classroom
- theapsoluterecap.com
- Remind: @mcqueen34
- Atomsmith.co

Unit 5

Thermochemistry

- Calorimetry
- Hess's Law
- Enthalpy, Entropy, Gibbs

Unit 6

Equilibrium

- Le Chatelier's Principle
- Equilibrium Constant

Unit 7

Solution
Equilibrium

- Acid-Base Equilibrium
- Buffers
- K_{sp}

Unit 8

Electrochemistry

- Galvanic Cells
- Cell Potential

Unit 9

Kinetics

- Reaction Rates
- Reaction Order
- Energy Diagrams

Unit 10

Review

- Daily Graded FRQs
- 5 full length MC test
- AP Daily Videos
- Personal Progress Checks (AP Classroom)