

Name of School:

Name of Course: Advanced Placement Chemistry

### Instructor Information

**Name:**

**E-mail address:**

**School phone number:**

**Web page address:**

**Best times to be reached:**

### Course Description

Advanced Placement Chemistry is a three-term, rigorous and academically challenging college level course. Topics covered in General Chemistry are expanded upon and new areas such as Equilibrium, Electrochemistry and Nuclear Chemistry are introduced. These concepts are developed into increasingly sophisticated ideas that are useful in other physical, biological, and applied sciences such as medicine, engineering, agriculture, and consumer sciences. The class provides students a wide opportunity to develop and improve their problem solving and investigative skills. Students are strongly encouraged to take the National CEEB Advanced Placement Exam. There is an additional fee for materials.

### District Standards and Power Benchmarks

#### **Standard 1: Understands and applies the principles of scientific inquiry**

Benchmark A: Formulates and revises scientific explanations and models

Benchmark B: Understands how scientific knowledge changes with new evidence

Benchmark C: Uses technology and mathematics to perform accurate scientific investigations and communications

Benchmark D: Demonstrates safe handling procedures

#### **Standard 2: Understands and applies the principles of physical science**

### Course Information

Advanced Placement Chemistry is a three-term course with the pre-requisite of General Chemistry and Algebra 2. One and one-half unit of credit will be earned for the completion of this course.

### Course Outline/Calendar

Atomic Theory and Structure

Chemical Bonding

Nuclear Chemistry

Gases

Kinetic Molecular Theory

Liquids and Solids

Solutions

Reaction Types

Stoichiometry

Equilibrium

Kinetics

Thermodynamics

**Text/Other Required Materials/Resources**

Kotz, J.C.; Trichel, P.M.; Weaver, G.C. (2006). *Chemistry and Chemical Reactivity* (6<sup>th</sup> edition). Belmont, CA: Thomson Brooks/Cole.

**Instructional Procedures & Support****Classroom Management Procedures****Assessment Plan**

The students are assessed on a point system. In addition to classwork, labs, tests and quizzes, the students are assessed on: district performance-based assessments and a Spreadsheet Integration Project.

**Grading System**

92 – 100	A
83 – 91	B
68 – 82	C
60 – 67	D
0 – 59	F