

# AP CHEMISTRY

## Class Overview:

Classes meet on alternating days in a 90 minute block. Each block centers around a 45-70 minute lecture with an accompanying activity. Full blocks are set aside with 2-4 Saturday morning labs to cover the AP requirements for Lab time. The focus of the course is on preparation for the AP exam along with applications of the topics covered to real life events.

**Textbook:** *Chemistry*, 6 edition, Zumdahl

**Supplemental book:** *The Ultimate Equations Handbook*, Hague, George R. and Smith, Jane D.

**Labs:** All labs are “wet” labs unless otherwise noted. The expectation for all labs is that students will generate/explore experimental questions, gather data, do calculations, and draw/evaluate conclusions. The students are responsible for writing a purpose, procedure, data table, calculations, and evaluation/conclusion for all labs. Time spent in the lab is estimated but includes only time doing the lab NOT pre- or post-lab work.

Labs included every year (but are not limited to these labs) include:

AP CHEMISTRY:Lab Title	Time
Nitric Acid/Cu demo	0.25
Air is a substance demo	0.25
Lab Introduction Lab (Brown/Lemay Lb1)	2
Conductivity Demo	0.75
Redox - Mg Burning Lab	1
Paper Chromatography	2.5
Types of Reactions Planning Lab	2.5
Types of Reactions Lab	4.5
Electrochemistry Cell	2
Stoichiometry of Cu	4
Hess' Law -Coffee Cup	3
Iodine solution make-up	1
Iodine reaction lab	2.5
Solubility Lab ( $K_{sp}$ of $\text{Ca}(\text{NO}_3)_2$ )	1.5
State Police Lab Field Trip	3
Dissociation of a Weak Acid	5
Liquid nitrogen demo	0.5
Dry Ice themite/other demo	0.75
Gummy bear combustion demo	0.25
Van de Graaf demo	0.5
Thermal Decomposition of a Hydrate	1.5