

## AP Chemistry Syllabus

2022-2023

### **AP Chemistry Course Description:**

Welcome to AP Chemistry. This course is designed to present the equivalent of a one-year Freshman College Chemistry Course. It offers the opportunity to earn college credit (determined by AP score) as well as high school credit. Thus one of your goals is to prepare for the AP Chemistry exam in May, which also gives a rigorous preparation in College Chemistry. Students will gain an in-depth understanding of the fundamentals of chemical and mathematical problem solving. A large portion of the course will involve laboratory activities that would be comparable to a college level laboratory experience. This course will also fulfill the college laboratory requirement.

### **Textbook:**

Chemistry by Zumdahl , Zumdahl, and DeCoste, 10'th edition, Cengage Learning, 2014

ISBN# 13:978-1-305-95773-2

### **Recommended Materials:**

Notebook with loose leaf and graph paper

TI- n'spire CX or CAS calculator

### **Grade Percentages:**

Tests: 60% 80% of semester grade

Quizzes: 10%

Labs: 10%

Homework: 10%

Class Participation: 10%

Exam: 20% of semester grade

### **Tests:**

Tests will typically be given after each unit. They will consist of multiple choice and free response type questions that are similar to questions that will be found on the AP chemistry exam.

### **Laboratory Experiments:**

A number of labs will be performed throughout the year. Some of these will be guided inquiry labs where you originate the lab procedure needed to carry out the experiment.

Pre-lab questions must be answered and the lab purpose, hypotheses and procedure be written in the lab book **before** performing the lab. Labs should be written according to the handout "Writing in a science logbook". Procedure may be written in your own words but must include enough information that someone could perform the lab from what you have written. You do not need to write the steps for using Vernier probes and collecting data with them. For example you could write: ***Use a Vernier pH probe to measure the pH of each test tube*** rather than including 6 or 7 steps about how to use the pH probe.

You may cut and paste graphs and data tables. The labs must be written neatly. You will work in groups to perform the lab and should discuss your results with each other but lab reports must be written individually.

Lab due dates will be approximately one week after performing the lab. They will be announced for each lab in class.

### **Homework:**

This chemistry class will be fast paced and intense. You need to do the assigned reading **before** class. It is recommended that you make notes to summarize your reading. It is important that you do all of the reading as I will not have time to cover everything during lecture. It will be your responsibility to ask questions about anything in the reading that you do not understand which was not covered in class. I will be available during tutorial or by appointment before or after school to help you. It is crucial that you learn to work all of the types of problems. On many of the AP exam free responses, you will not only have to work the problem but justify your answer. This means you need a complete understanding of the process if you are going to be successful. **All homework is due before you take the unit test.**

**AP Exam:**

The AP Exam will be given on Friday, May 12, 2023, at 8:00 P.M. It is recommended that students purchase additional resource materials and practice additional problems while we are going over a specific topic. Some review guides you may find helpful are:

AP Chemistry Crash Course Book by Adrian Dingle

Kaplan AP Chemistry