AP Chemistry Syllabus

2019-2020

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: 50%

Quizzes: 10%

Labs: 15%

Homework: 10%

Exam: 15%

Tests:

Tests will typically be given after one or two chapters. 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. Test corrections may be made within 3 days of the test. They must be made in my classroom and may be made during tutorial or during your free period. Points that may be earned back are 25%.

Laboratory Experiments:

There will be at least 16 labs performed throughout the year. At least 6 of these will be guided inquiry labs where you will come up with the lab procedure 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 that 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 explain your answer. This means you need a complete understanding of the process if you are going to be successful. <u>All homework is due before you take the chapter test.</u>

AP Exam:

All juniors will take the AP Exam. The exam is optional for seniors. It is strongly 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:

Cracking the AP Chemistry Exam 2018 Edition by Princeton Review

Kaplan AP Chemistry

Barron's AP Chemistry Review

*Another resource you may find helpful throughout the year is the companion study guide for the textbook. It is called: <u>Study Guide for Zumdahl/ Zumdahl/ DeCoste's Chemistry, 10'th</u> <u>Edition</u> It is available on Amazon. However the cost is \$112.83. The study guide for the 7'th edition of the textbook is also available on Amazon and it only costs \$8.98. It matches up quite well to the 10'th edition study guide for a lot less money.