

AP Chemistry 2024 - 2025

Instructor: Mr. Johnson, room E110

Help Session Hours: before school select days; Period 1 – Tutorial time

Grading: 92% - A
83% - B
74% - C
65% - D
64% and below – F

Help & Resources: I am using the **LearnBPS website** (regular school login) for classroom notes, video tutorials that I have personally made, resources for help and studying, and more! I strongly encourage you to use this resource for help and for class. We will also be using resources from the College Board site and students who are enrolled in AP chemistry will be required to create a College Board account and a join code will be provided to join our AP chemistry classroom site, which contains tutorial videos, practice problems, and support for students in this class.

Absences:

Because each day builds upon what we learned the previous day, absences are a concern. If you are absent, you are responsible for making up the notes, assignment, etc. Whenever possible, make things up ahead of time!

Assignments/Lab Work/Tests:

Grading: For this class, homework is vital. Know that the AP curriculum is rigorous and having 100% correct answers for each and every problem is not realistic. To receive credit for assignments, problems must be worked out to their fullest and we will be going over how to approach the problems in a learning environment. It will not be possible to copy down all of the correct work without anything recorded, however. You need to have an attempt at the problems!

Lab work will be graded for accuracy and depth of explanation. Labs will be based upon the AP curriculum expectations, as many of the AP exam questions are taken directly from those experiences, as will be a portion asking students to design the experiment with procedural steps. **All labs are required and any that are missed will need to be made up the next day on the student's own time.** You may choose your own lab partner as long as you work productively and safely together.

Tests will cover topics practiced directly but they will be in the format of the AP exam, meaning that there will be a multiple choice section along with a separate free-response (FRQ) section for each unit. Tests will account for roughly 60% of the overall grade.

The 1st semester final test is mandatory for all students of this AP course. It is worth 15% of your final grade. A review guide will be provided to help you to prepare. **Students who are not taking the AP exam will also be required to take the 2nd semester final, which will be calculated into the overall 2nd semester grade. AP exam performances are not factored into the 2nd semester grades. Dual credit students will take the BSC final exam 2nd semester.**

Most importantly:

Positive attitude! Have fun!

AP Chemistry Topics

The AP Chemistry College Board has identified the following 9 topics of curriculum:

- Unit 1: Atomic Structure and Properties**
- Unit 2: Molecular and Ionic Compound Structure and Properties**
- Unit 3: Intermolecular Forces and Properties**
- Unit 4: Chemical Reactions**
- Unit 5: Kinetics**
- Unit 6: Thermodynamics**
- Unit 7: Equilibrium**
- Unit 8: Acids and Bases**
- Unit 9: Applications of Thermodynamics**

<http://apclassroom.collegeboard.org/7/home>

To accomplish proficiency in each of these topics, I have broken the curriculum down into 14 units of study utilizing our Zumdahl textbook:

- Unit 0: General chemistry background skills, tutorials, resources**
- Unit 1: Atomic Structure and Periodicity – Chapter 7**
- Unit 2: Bonding, Lewis, and Molecular Geometries – Chapters 8 and 9**
- Unit 3: Composition and Reaction Stoichiometry – Chapter 3**
- Unit 4: Chemical Reactions – Chapter 4**
- Unit 5: Electrochemistry: Electrolysis, Electroplating, Redox & Galvanic Cells – Chapter 16**
- Unit 6: Intermolecular Forces (IMFs) and Condensed States of Matter (Solutions) – Chapter 11**
- Unit 7: General Equilibrium & K_{sp} – Chapter 13**
- Unit 8: Acid-Base Equilibrium – Chapter 14**
- Unit 9: Buffers and Titrations – Chapter 15**
- Unit 10: Gas Laws – Chapter 5**
- Unit 11: Thermochemistry – Chapter 6**
- Unit 12: Thermodynamics – Chapters 16 & 17**
- Unit 13: Kinetics – Rates and Mechanisms – Chapter 12**
- Unit 14: AP Chemistry Review**

For each topic covered, there will be a tutorial video that is pre-recorded to support students who have missed class and/or need to revisit material. AP is fast-paced and requires daily homework time.