

# AP Chemistry Guidelines & Requirements 2019-2020

## COURSE DESCRIPTION

AP Chemistry is a rigorous second-year chemistry course that is equivalent to one year of general college chemistry. AP Chemistry expands on topics from pre-AP Chemistry such as stoichiometry, reactions, solutions, and acids and bases; it also covers new topics such as equilibrium, thermodynamics, kinetics, and electrochemistry.

Upon completion of the course, most students will take the AP Chemistry exam, which will give them the option of claiming college credit. Students need to check with those colleges to which they are applying to understand the specifics of AP credit that may be claimed.

**AP EXAM:** Thursday 8:00 AM, May 7, 2020

**COURSE INSTRUCTOR:** Sandy Lee, [sandra.lee@allensd.org](mailto:sandra.lee@allensd.org), 972-727-0400 x 5629

**PREREQUISITES:** Biology, Chemistry, Physics (may be taken concurrently), Algebra 2

**TEXT:** 11th edition Chemistry, by Raymond Chang, Kenneth A. Goldsby

**GRADING:** Quarter grades will be determined from an average of:

- 10% - Daily/Homework
  - Daily/Home Work will include: Unit practice problems, Connect practice problems, Albert.io practice problems, College Board practice problems, and/or practice Canvas quizzes.
- 25% - Labs & Lab Quizzes
  - Labs will include pre-labs, data collection in lab notebook, and written analysis.
  - Lab Quizzes will cover the material you learned in the lab and can be in the form of MC and/or FR similar to the unit quizzes but a calculator will be allowed.
- 65% - Quizzes
  - Unit Quizzes - Instead of Unit Tests/Exams, multiple Unit Quizzes (usually 2) will be given for each unit
    - Typically 5-10 AP like multiple choice (MC) questions and/or 1 AP like Free Response (FR) with multiple parts.
    - Calculators are NOT ALLOWED on the MC section and are allowed on the FR section.
    - You will have 1.5 min/MC question and 9-23 min on the FR section depending on if it is a short or long FR.
    - Material on each quiz is cumulative in nature and will likely include material from prior units to solidify your learning.
  - You Will Not Forget Quizzes
    - There will be one You Will Not Forget quiz every unit after Unit 1
    - Three questions, all 3 must be answered correctly or the grade is 0; can be retaken for max grade of 70
    - Previous topics each quiz can cover will be given at the beginning of the unit
    - These quizzes will be weighted at a quarter quiz grade
  - Mental Math Quizzes
    - There will be daily Mental Math Quizzes in Unit 0
    - Thereafter, 1 Mental Math Quiz per Unit for the remainder of the school year
    - These quizzes will be weighted at a quarter quiz grade.

- Make-ups
  - Quizzes are taken at the [Testing Center](#) & you have 1 calendar day for every consecutive class day that you were absent to make-up the quiz. Ex. if you were absent 2 class days (Mon A-Day and Wed A-Day), you have Thu B-Day and Fri A-Day to take the quiz in the [Testing Center](#). It is IMPORTANT you sign up for a spot ASAP. Do not wait until you return all better to sign up for a spot. If no spot is available, you will need to go to the Testing Center and wait until a spot becomes available.
  - Labs/Activities must be made up within one week of when the lab was performed in class. Make an appt. with me to make the lab up and make an appt. in the [Testing Center](#) to make-up the lab quiz.
- Retakes (one retake only for each quiz)
  - Re-Quizzes are taken at the [Testing Center](#) & you have 5 *calendar* days after the quiz is entered into Skyward to complete a retake assignment and to retake the quiz. Ex. if you took the quiz on Mon A-Day and it is entered into Skyward on Mon A-Day, then you have until the following Monday to retake the quiz in the [Testing Center](#). It is IMPORTANT you sign up for a spot ASAP. Do not wait to sign up for a spot.
  - A maximum grade of 70 can be earned for a retake and will replace your original grade.
- Late Work
  - 1 calendar day = maximum of 60
  - 2 calendar days = maximum of 50
  - 3+ calendar days = 0
  - Saturday by 4:05 pm CST = 1 calendar day; submit pictures via email (if not a Canvas submission) and turn in to me on Monday
  - Sunday by 4:05 pm CST = 2 calendar days; submit pictures via email (if not a Canvas submission) and turn in to me on Monday

Please note: Earn every point you can while you can. ***I DO NOT BUMP GRADES*** and there is ***NO EXTRA CREDIT!***

### **COURSE MATERIALS:**

All students should bring the following items with them to class every day:

- Current notes & prior notes (ex. If we are currently on Unit 3, Units 1-3 notes should be brought to class)
- Reference material (periodic table, formula chart, mental math reference sheet)
- Lab instructions
- Scientific or Graphing Calculator
- Notebook paper
- Something to take notes onto (notebook paper, spiral, composition notebook, etc.)
- Pen (blue/black for Lab Notebook)
- Pencils
- Highlighter
- You will need to purchase a carbonless lab notebook. These cost around \$15 and can be purchased through Amazon or at CCCC bookstores (more expensive). You will need one that has at least 50 sets of pages (50 pages & 50 duplicate copies). If this is a financial hardship for you, please see me.

## **COURSE CONTENT:**

### First Semester Topics:

- Unit 0 Significant Figures, Mental Math, & Laboratory
- Unit 1 Atomic Structure & Properties (Chang Chap. 1-3,7,8)
- Unit 2 Molecular and Ionic Compound Structure and Properties
- Unit 3 Intermolecular Forces and Properties
- Unit 4 Chemical Reactions
- Unit 5 Kinetics (Chang Chap.13)

### Second Semester Topics:

- Unit 6 Thermodynamics (Chang Chap.6,17)
- Unit 7 Equilibrium (Chang Chap. 14,16)
- Unit 8 Acids & Bases (Chang Chap. 16)
- Unit 9 Applications of Thermodynamics (Chang Chap. 18)

## **SUGGESTED STUDY HABITS**

- Read the online book. Unlike Pre-AP/IB Chemistry, the book is your primary source of instruction. There is so much material to cover in AP Chem, that there is no way I can cover everything in class. It is expected you will read the book and work through the examples in the book. Learning from a book is an important skill to master – it is your primary source of instruction throughout college. I would suggest you skim through the section of the book I will cover in lecture the night before, then carefully read, take notes, and work through the practice problems the night I cover the material.
- Do the assigned classwork/ homework. Many of these problems are not trivial and you ***must practice***. I cannot stress this enough.
- Form a study group. Explaining chemistry to others is an excellent way to reinforce your learning. And, often, someone else may be able to help with a concept you are finding difficult.
- Buy an AP Chemistry study guide. Use this throughout the year to review for tests.

## HONOR CODE POLICY

We all know copying during a quiz is cheating and stealing quizzes from a teacher is cheating, but did you know that you're cheating if you:

- Present someone else's ideas and/or work as if they are your own (i.e., plagiarize), which includes paraphrasing another's written work without citing the source
- Fabricate data on a lab report
- Collaborate on an assignment which is told to be done individually (including but not limited to take home quizzes)
- Pass along or receive test information from one class period to another
- Allowing another to copy your work as if it was their own.

Academic integrity is important to success at Allen High School and in later life. Academic integrity is based on five values: honesty, trust, fairness, respect, and responsibility. If you are to fully benefit from this class and be fairly evaluated for your work, we must work together in an environment that affirms these values. Work that violates these values is incompatible with the goals of this class and will not be tolerated. Every member of the class is expected to foster the spirit of academic honesty at all times and to encourage that spirit among others.

Cell phones are not allowed anywhere on your person or on your desk during assessments (this includes on your seat, under your legs, etc.) I will not go through every scenario of academic dishonesty because you are intelligent enough to know when you and others are cheating without me detailing every possible scenario. If you question whether or not something is cheating, ask me, via email, Remind msg., Canvas msg., or in person. The final decision if someone is cheating is not a debate and that final decision is made by me. If you are found with a cellphone, it will be confiscated and it will be assumed that you are cheating. You will be given a zero for that assessment, your parents will be notified, and a discipline notice for Honor Code Violation will be posted in Skyward.

*TRUST TAKES YEARS TO BUILD, SECONDS TO BREAK, AND FOREVER TO REPAIR.*

**Testing Center Sign Up QR Code:**

