

AP Chemistry Syllabus 2017-2018

Course Description

This AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first year of college. For most students, the course enables them to undertake, as a freshman, second year work in the chemistry sequence at their institution or to register in courses in other fields where general chemistry is a prerequisite. This course is structured around the "Six Big Ideas" articulated in the AP Chemistry curriculum framework provided by the College Board. A special emphasis will be placed on the seven science practices, which capture important aspects of the work that scientists engage in, with learning objectives that combine content with inquiry and reasoning skills. AP Chemistry is open to all students that have completed a year of chemistry who wish to take part in a rigorous and academically challenging course.

Chemistry Big Ideas

- Big Idea 1: Structure of matter: The chemical elements are fundamental building materials of matter, and all matter can be understood in terms of the arrangement of atoms. These atoms retain their identity in chemical reactions.
- Big Idea 2: Properties of matter-characteristics, states, and forces of attraction: Chemical and physical properties of materials can be explained by the structure and the arrangement of atoms, ions, or molecules and the forces between them.
- Big Idea 3: Chemical reactions: Changes in matter involve the rearrangement and/or reorganization of atoms and/or the transfer of electrons.
- Big Idea 4: Rates of chemical reactions: Rates of chemical reactions are determined by details of the molecular collisions.
- Big Idea 5: Thermodynamics: The laws of thermodynamics describe the essential role of energy and explain and predict the direction of changes in matter.
- Big Idea 6: Equilibrium: Any bond or intermolecular attraction that can be formed can be broken. These two processes are in dynamic competition, sensitive to initial conditions and external distresses.

Textbook & Supplemental Text

Chemistry 8th Ed. Whitten, Davis, Peck and Stanley (2007) and Cracking the AP Chemistry Exam, 2017 Edition

Required Materials

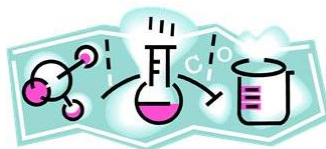
- Scientific Calculator
- 2" or 3" Binder for Organization
- Spiral Notebook for Notes
- Pen/Pencil

Grading Scale and Percentages

85-100%	A	Participation	5%
75-84.9%	B	Homework	15%
65-74.9%	C	Labs	20%
55-64.9%	D	Quizzes, Tests and Unit Exams	45%
< 54.9%	F	Semester Final	15%

Smart/Cell Phones

In order to keep students engaged at all times, cellular devices will be collected at the beginning of class and returned at the end of class, no exceptions. Parents need to be aware that they may not be able to communicate with their son/daughter during the period.



Attendance

The bottom line is do your best to be here and not to be absent for AP Chemistry. Missing class for any reason will be detrimental to your understanding of chemistry, especially new material. If you miss class, you weaken your foundation for future concepts that will build upon the material you missed. Also, your time in lab is crucial and your lab partners will continue to work on despite your absence. For that reason, experiences you miss in lab cannot be made up and therefore for each absence you shall receive a 5% deduction in your grade for that lab for each day missed.

Homework

Expect anywhere between 5-7 hours of homework each week which may include assigned problems and/or readings. This does not include additional preparation for the AP Exam which you should be doing on your own. Assignments will need to be completed in their entirety and on time to receive full credit. Late work turned in within one week of the due date will receive up to 75% credit and older assignments will receive a maximum of 50% credit. Completed homework will be stamped and assignment packets will be turned in before each unit exam.

Labs

The labs completed require following or developing processes and procedures, taking observations and data manipulation. Students communicate and collaborate in lab groups; however, each student is responsible for their own laboratory report for every lab performed. A minimum of 25% of class time should be spent doing hands-on laboratory activities. Attendance is mandatory on lab days and prior to starting lab, a lab safety contract and test must be completed.

Quizzes, Tests and Unit Exams

Quizzes can be announced or unannounced and are given on a weekly basis. Chapter tests and unit exams will always be announced at least 1 week prior. It is the student's responsibility to make up a missed quiz, test or exam as soon as possible and if not made up in a reasonable amount of time (1 week), you will receive a zero in the gradebook.

Honesty & Integrity

Students are expected to show work on math-type problems, reword the question into their answers and to submit only their own individual work. Work that is plagiarized, copied or in any other way not the students own work will receive a zero and may face disciplinary action and expulsion from the class.

Contact Information

The best way to get a hold of me is by email or you may try calling the school at (562) 869-7301 ext 5306 (room C-205) between the hours of 7:00 am - 7:30 am or 2:50 pm to 3:10 pm. Please always include the name of your son or daughter along with the period they have me.

Web Links and Email

Class Website: pcoe.weebly.com

Remind Class Notification System: www.remind.com/join/@4ap2017

Shmoop Class Info: www.shmoop.com/signup/downeyusd-students

Email: pcoe@dusd.net

AP Chemistry is one of the most challenging science courses you will take. Be prepared to work, learn, and have a little fun. Please print and sign your name below indicating that you have read this syllabus and understand the class expectations which are printed on this handout. Have one of your parents do the same. If there are any questions, please feel free to contact me. Thank you for your cooperation and let's have a fantastic year!

Please Keep this Paper in Your Binder

<<Cut On Dotted Line and Return Bottom Part to Teacher, Keep Top Portion for Your Binder>>

Yes, I plan on taking AP Chemistry for the 2017-2018 school year and agree to the conditions discussed above.

Student Name: _____ Signature: _____

Parent Name: _____ Signature: _____

Date: _____ Period: _____