

Charlotte High School Advanced Placement Chemistry 2024 – 2025



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Course Description:

• Advanced Placement (AP) Chemistry is designed to be the equivalent of a first-year college general chemistry course.

- Students who enroll in AP Chemistry display a high level of competency in honors chemistry and a strong desire to pursue a major in the sciences during college. The course is designed around the content framework provided by the College Board.
- AP Chemistry goes more in-depth with some topics and covers topics not addressed during the Chemistry Honors class.
- Students enrolled in AP Chemistry are expected to demonstrate commitment, motivation, and academic maturity.
- All students enrolled in AP Chemistry will take the AP exam administered by the College Board. The AP Chemistry Exam is scheduled for **Tuesday**, **May 6**, **2025**, **at 8:00 AM**.

Course Overview:

- The topics are covered using a discussion-based model based on Slide presentations supplemented with assignments integrating AP-type exam questions. Emphasis is placed on problem-solving skills that are needed for the types of problems that will be encountered on the AP exam. Students are encouraged to be accurate and concise in their writing when answering questions about a topic.
- Laboratory work will be integrated throughout the course. Student laboratory investigations will emphasize conceptual understanding coupled with inquiry and reasoning skills. This work helps form the foundation for student understanding of the topics presented during the lecture.
- The laboratory contains appropriate equipment, and chemicals necessary to provide a college-level lab experience. Students will physically manipulate equipment and materials to make relevant observations and collect data; use the collected data to form conclusions and verify hypotheses; and communicate and compare results informally with others.

Topic Outline:

- Matter, Atoms, and Organic Chemistry
- Atomic Structure and Properties
- Compound Structure and Properties
- Properties of Substances and Mixtures
- Chemical Reactions
- Kinetics
- Thermochemistry
- Equilibrium
- Acids and Bases
- Thermodynamics and Electrochemistry

Please see Canvas for more details about each topic

Classroom Policies and Attendance:

- The class will be administered using Canvas.
 - All assignments will be submitted using Canvas.
 - No handwritten assignments will be accepted. If an assignment is done on paper, it should be uploaded into Canvas.
 - Assignments in Canvas will have a due date and close at the end of the unit. Any
 unsubmitted assignments cannot be completed after this happens, so if you are
 absent or miss an assignment keep this important restriction in mind!
 - Grades will be posted using Focus. Even though Canvas does track grades, Focus is the official grading program for Charlotte County Public Schools. The grade in Focus is your grade for the course.
- Homework is due on the assigned date given. Late homework will be penalized and may not be accepted. (See Canvas restriction above!)
- Please be in the classroom, on time and prepared to begin class. Students should be seated and ready to work when the bell rings. There will be assignments that you will have to begin when class starts.
- Any student involved in dishonest activities in tests or other assigned activities will receive a grade of zero (0) for that assignment.
- Questions and discussions help facilitate the learning process; class participation is highly encouraged.
- Cell phones are prohibited unless they pertain directly to the assignment.
- The make-up policy for work missed due to absence follows the Code of Student Conduct of Charlotte County Public Schools.
 - Students are eligible to make up classwork and homework due to absences.
 - Students are allowed two days for each day absent to make up work.
 - There is no academic penalty unless the work is not made up in the allowable time frame in which case an academic penalty or a zero may be assigned for the work missed.
 - Exams, quizzes, and labs should be rescheduled with the instructor as soon as possible. (Again, refer to the Canvas restriction above!)

Required Materials:

- Chromebook (provided by CHS)
- Writing utensils (pen, pencils, highlighters, etc.)
- Loose-leaf paper/notebook (bound or composition) for in-class practice work
- AP Periodic Table, and AP Formula sheet
- Graphing calculator
- Earbuds or headphones for use with Chromebook

Assessments and Grades:

• The grading scale, which conforms to school policy, is as follows:

A:
$$90-100$$
 B: $80-89$ C: $70-79$ D: $60-69$ F: <60

- The student grade each quarter is based on total points earned in the following areas:
 - **Exams:** Exams are administered by unit topic. Each exam is comprehensive meaning that material will be seen repeatedly regularly.
 - Quizzes: Quizzes are to ensure understanding of topics within a unit.
 - Laboratory work: Experimentation and lab reports (hands-on and virtual) as assigned.
 - Homework/AP Practice Problems: Problems assigned to enhance comprehension throughout the course.
 - Online Practice: Problems assigned through AP Classroom and other online resources.
- The semester grades (1 and 2) for the course will be calculated following the policy set forth by Charlotte County Public Schools, which is as follows: 35% quarter, 35% quarter, and 30% standards-based exam given at the end of each semester.

Textbook, Lab Manuals, Online Resources:

- Tro, Nivaldo J., <u>Chemistry A Molecular Approach AP Edition</u>, <u>5th Edition</u>. Pearson Education, 2020.
- AP Chemistry Guided Inquiry Experiments: Applying the Science Practices. College Board, 2019.
- Advanced Chemistry through Inquiry. PASCO Scientific, 2015.
- AP Classroom. College Board online myap.collegeboard.org/login