



Course Syllabus

Course Title: Chemistry AB

School Year: 2024-2025

Semester(s): 1 and 2

Grade Level(s): 9, 10, 11, 12

Course Day(s) and Times: Mondays and Wednesdays, 2:00 pm - 3:00pm PST

Teacher Information:

- **Name:** Clayton Lutz
- **Email:** clay.lutz@brancheslearning.org
- **Office Hours:** By appointment only
- **Branches Learning Main Office Number:** (323) 955-0114

Class Materials - <https://brancheslearning.org/product/chemistry/#Materials>

Course Description:

This first-year high school chemistry course is designed to align with Next Generation Science Standards (NGSS) and provide students with a comprehensive understanding of the fundamental principles of chemistry. Through inquiry-based activities, labs, and projects, students explore various topics, including changes in matter, chemical reactions and bonding, atomic structure, stoichiometry, and thermodynamics. The curriculum includes real-world applications of chemistry, allowing students to see the relevance of chemistry in their daily lives. Students engage in collaborative projects encouraging critical thinking, problem-solving, and communication skills.

Course Units

Unit 1: Introduction to Chemistry

Unit 2: States of Matter

Unit 3: Measurements, Matter, and Change

Unit 4: Behavior of Gases

Unit 5: Atomic Structure and Electrons in Atoms

Unit 6: The Periodic Table and Chemical Nomenclature

Unit 7: Ionic, Covalent, and Metallic Bonding



Unit 8: The Mole Iconic

Unit 9: Chemical Reactions

Unit 10: Stoichiometry

Unit 11: Water

Unit 10: Solutions, Acids, and Bases

Course Expectations:

To experience the most success in this course, please review the assignments and reading before attending class. There will be opportunities to ask questions in class and through the email stated above. Attend class from a quiet place free of distractions for the meeting time. Have your materials ready, camera on, and be on time. There is an expectation that all participants will treat others politely, professionally and ask for help. There is a zero tolerance policy for plagiarism including AI works.

Grading Scale

High School, Grades 9-12

- A = 90% -100%
- B = 80%-89%
- C = 70%-79%
- D = 60%-69%
- F = 0%-59%

Final grades are determined by the quality and completion of assignments, attendance, and participation.

Important Branches Learning Policy Information

Camera Policy

Branches Learning requires students to keep their cameras on during live classes unless otherwise instructed by the teacher. Exceptions can be made in rare circumstances if the course teacher, supervising teacher (HST), and the parent all approve a camera waiver.

Headset Policy

Students attending live classes from a shared space must have a headset with a microphone to ensure the class is not disrupted by background noise.



Attendance Policy

Absences must be reported to the course instructor via email or sent to info@brancheslearning.org. Class recordings are available upon requests.

Attendance and participation are part of the final grade. Students who miss more than 40% of live classes may fail the course. Exceptions may be made if a pre-approved plan is in place.

Late Work

Assignments turned in after the due date will result in a lower grade unless pre-approved by the instructor.