



AP Chemistry Syllabus 2026-2027

Contact Information

Teacher: Jamie O'Malley

School: [Helena High School](#)

Website: https://staff.helenaschools.org/staff_page/jOMalley/

Phone: (406) 324-2286

Email: jomalley@helenaschools.org

Office Hours

Monday – Friday: 3:15-3:45, or schedule an alternate time directly with me. Teams or email are great ways to communicate with me.

Online Platforms

- **Teams:** we will be using Microsoft Teams through the school district for our daily assignments and weekly agendas.
- **AP Classroom:** for watching instructional videos, taking tests, and progress checks.

Supplies Needed

- Electronic device such as a Chromebook for occasional online classwork or activities
- Pencils and pens
- Scientific calculator capable of scientific notation
- 3 ring Binder to keep track of handouts and notes
- Notebook paper
- Spiral notebook

Supplies Needed For labs:

- Splash resistant safety goggles (students may buy a pair from me for \$3 or borrow a used pair)
- Closed toed shoes on lab days
- Hair ties for long hair
- Non-latex gloves for labs (one box can be shared with a partner)

Pre-requisites

Chemistry 1 and Algebra II

Text: Brown, Lemay, Bursten, Murphy, and Woodward, (2012), *Chemistry, The Central Science*, (12th edition).

Lab Manuals: Vonderbrink, Sally Ann, Ph.D, *Laboratory Experiments for Advanced Placement Chemistry*, (2nd edition).

College Board, *AP Chemistry Guided-Inquiry Experiments: Applying the Science Practices*, (2013).

These will be provided.

Course Description: <file:///C:/Users/jomalley/OneDrive%20-%20Helena%20School%20District/AP%20Chem/CED%202024.pdf>



The purpose of Advanced Placement Chemistry is to provide a college level course in chemistry and to prepare the student to seek credit and/or appropriate placement in college chemistry courses.

Topics to be covered:

Units of Instruction	Exam Weighting
Unit 1: Atomic Structure and Properties	7-9%
Unit 2: Compound Structure and Properties	7-9%
Unit 3: Properties of Substances and Mixtures	18-22%
Unit 4: Chemical Reactions	7-9%
Unit 5: Kinetics	7-9%
Unit 6: Thermochemistry	7-9%
Unit 7: Equilibrium	7-9%
Unit 8: Acids and Bases	11-15%
Unit 9: Thermodynamics and Electrochemistry	7-9%

Laboratory Requirement

AP Chemistry students will be spending at least 25% of their class time performing hands-on laboratory experiments. Students will be collecting, processing, manipulating, and graphing data from both qualitative and quantitative observations. The students will be also designing, carrying out, and analyzing data from inquiry-based labs.

Classroom Expectations

Safety for In-Person Labs-It is my responsibility to teach you the techniques for safe use of the chemistry lab, it is your responsibility to be mature and follow the rules. Failure to follow the safety rules will result in a phone call home and you will **not receive credit!** Wearing closed-toed shoes and safety goggles is a **must** for every lab. A lab safety contract must be signed before performing in-person labs.

Effort

What you put into this class is what you'll get out! AP Chemistry is a tough subject, and it will take more hours of studying than a typical high school class. Please dedicate some time **every day** to studying AP Chem, whether it's reading, watching videos, completing assignments, or taking notes. Even just 15 minutes of studying a day helps! There is a direct correlation between how much time you study outside of class and AP exam scores. We are pushing two semesters of college chemistry into a high school schedule, so we follow a tight and fast schedule. *Classwork becomes overwhelming quickly if you frequently miss school.*

Grading

Q1 (40%) Q2 (40%) Final Exam (20%). A: 90-100%; B: 80-90%; C: 70-79%; D: 60-69%; F: Below 60%. Grades will be entered into PowerSchool 1-3 times per week, and missing assignments will be given a zero and marked with a "missing" tab. All assignments from a current unit will receive full credit if they are turned in by the day of the unit test. After the unit test, assignments will not receive credit.

Assessments: The majority of your grade will be based on assessments, it concentrates more on what you know, than what you can complete as assignments. You can correct all tests and receive half points for corrected answers. You have one week from the assessment for the retake. ***If you can't find the time to retake or make up a test within ONE WEEK, you will not receive credit for the test.***

Food and Drinks: There will be no food or drinks in the lab.

Communication: Please tell me if you need help! I am usually quick to reply to emails and Teams chat.



Copying/Cheating: How can you learn anything if you go through life **copying** others? We have 182 days of school, use them to get smarter! The lender and the copier will both receive zeroes if caught. Please exercise self-control when using the internet. You might be tempted to copy answers off the internet on your assignments, but this does not help you understand the material at a deeper level and will not help you be successful on the AP Exam in May.

AP Exam

The AP Chemistry exam is Tuesday, May 5th, and 8:00 am. It consists of 60 multiple choice questions and seven free response essay questions. The exam is not required but highly recommended. Exam registration is in the fall! Visit the College Board website for more detailed information: [College Board](#). After the exam, we will do many fun projects such as chemistry career exploration, tie dying, listening to guest speakers, investigating the chemistry of cooking, medicinal Native plants, and performing an end of year lab based project.

About Your Teacher

I graduated from South Whidbey High School in 1987 and the University of Washington in 1991. I have a B.S. in Zoology and an M.S. in Secondary Education. I am currently working through my National Board Teaching Certification. My husband of 31 years and I have lived near Winston, MT for close to 15 years. I am not Suga Sean O'Malley's mom. I taught Biology and Math at North Kitsap High School for one year and Biology and AP Biology at Sultan High School for 6.5 years. After moving to Montana, I was the Director of Education at ExplorationWorks, and taught STEM at Starbase for 1.5 years. I have been teaching at HHS since 2016. Here at HHS, I have taught Chemistry 1, AP Chemistry, and Biology 1. I have been the advisor of Key Club and Science Olympiad. I also have several years' experience working in a biotechnology laboratory in Seattle performing microbiology quality control and immunology research, as well as providing support materials for chemical and biological testing at the Montana DPHHS. My most challenging career to date was a stay-at-home mom for close to seven years.

I enjoy hiking, camping, fishing, gardening, hunting, riding horses, winter sports, and of course, teaching! We have two herd dogs, two cats, and approximately 40 chickens. We also have two kids, Jake and Katie, who graduated from HHS in 2016 and 2017. Katie lives in Whitefish, MT and is a 2022 graduate of MSU with a degree in Graphic Design and is currently working in her field. Jake lives in Missoula with his Schnauzer Otto and works in the insurance technology industry.

Let's make it a great year!

-Jamie O'Malley



Please return this page to Mrs. O'Malley

I have read and understand Mrs. O'Malley's AP Chemistry syllabus.

Parent/guardian name (printed): _____

Parent/guardian Signature: _____

Student name (printed): _____

Student Signature: _____

Period: _____

Don't forget to turn in the signed Safety Contract so you can participate in labs!

