





Hull High School Honors Chemistry Syllabus 2023-2024



Class Information:

Mr. Keith McKay Room C119 Phone: 781-925-3000 ext. 2119

Email: kmckay@town.hull.ma.us (for parents/guardians)

Email: kmckay@hullpublicschools.us (for students)

Dear Students, Parents, and Guardians,

My name is Mr. McKay, and I will be your Chemistry teacher for the 2023-2024 school year. This will be my 6th year teaching science at Hull High School; I previously worked as a chemist for over 10 years, but in 2017 I decided to leave the commercial science industry to become a teacher. You will find that I am passionate and enthusiastic about all fields of science, and my goal is to inspire others to become interested in science as well!

Sincerely,

Mr. McKay

CLASS OVERVIEW:

This class will provide students with a background in various chemistry concepts. Students will gain an understanding of chemistry as a physical science and the role chemistry plays in society and everyday situations. The course will explore the basic concepts of chemistry including atomic and molecular structure, types of chemical reactions, periodic trends, stoichiometry, gas laws, and solution chemistry. The mathematical relationships of chemistry will also be explored. This course is aligned with the 2016 Massachusetts Science and Technology/Engineering Curriculum Framework.

During this class students will:

- Learn how atomic models are used to explain atoms as well as help us understand the interaction of elements and compounds at a macroscopic scale.
- Become familiar with the periodic table of elements and learn to use it as a versatile tool.
- Learn how atoms bond with each other to form new compounds.
- Learn how the law of conservation of mass allows us to predict the products that will be formed and what reactants are needed in a chemical reaction.
- Develop an understanding that physical and chemical properties reflect the nature of the interactions between molecules or atoms and can be used to classify and describe matter.

CLASS MATERIALS:

Textbook

The reference text for this course will be the OpenStax High School Chemistry online textbook. A link to this book will be posted on Google Classroom, and sections may be viewed at any time using a web browser (this is the best way to view the textbook). The OpenStax textbook can be found here: OpenStax Chemistry: Atoms First 2e https://openstax.org/details/books/physics

Calculator

Scientific calculators will be available in the classroom for students if needed, and students may use the Desmos calculator on their Chromebooks. Cell phone calculators will <u>not be permitted</u> to be used in class at any time. If students would like to purchase their own scientific calculators, a TI-30XIIS is recommended.

Chromebook

Students will use their Chromebook/Google Classroom and various apps to organize class materials and to complete assignments. It is strongly recommended that students provide a cover/case for their Chromebooks, a USB or Bluetooth mouse, and a pair of compatible headphones or earbuds.

GENERAL RULES AND EXPECTATIONS:

As part of the Hull High School Academic Expectations, students will be competent problem solvers, effective writers and readers, and capable users of technology. Students are expected to attend class daily, be on time for class, and arrive prepared to learn. It is also expected that students will respect themselves and each other, take pride in their work, and always put forth their best effort. Cell phones are not allowed in class unless permitted by the teacher during special circumstances. Food is also not allowed in class unless permitted by the teacher during special circumstances. Drinks are allowed if they are stored in a suitable container, but they are not allowed in the lab bench areas. Students in this class are required to come to class with all necessary materials including a charged Chromebook. Plagiarism of any form will not be tolerated. Separate sets of guidelines will be provided to outline detailed rules/expectations and day-to-day classroom procedures.

ABSENCE POLICY:

If a student is absent, the Hull High School policy is that they have double the number of days of absence to make up the work. If a student is absent for an assessment, the absence must be excused to be eligible for a makeup. Students are responsible for checking Google Classroom/Aspen to find any assignments that were missed during an absence. If you are absent and have questions, please email me or speak with me in person immediately after returning to school.

AFTER SCHOOL HELP AND MAKEUPS:

I will be available after school on Mondays (unless there is a faculty meeting) and at least one other day every week. If you have questions or need extra help, please do not hesitate to stop by. If you need to make up a missed test or lab, please speak with me in advance.

GRADING POLICY:

Students will complete a variety of assignments that are designed to help them understand new concepts and vocabulary, as well as to practice the skills that they will learn in Chemistry. Grades will be posted periodically on Aspen, and I will use the following special codes: A (absent, counts as zero but can be made up), M (missing assignment, counts as a zero), R (received but not yet graded), or E (excused, does not affect grade). Acts of plagiarism will result in zeros for grades that cannot be made up, as well as possible administrative action. Instead of using a traditional 100-point scale for grades, this class will use a 50 point scale (50-59 = F, 60-69 = D, 70-79 = C, 80-89 = B, 90-100 = A). Based on this scale, a grade of zero will be entered into Aspen as a 50.

Routine Classwork/Homework and Notes

Classwork/homework will be assigned along with lessons, and it is expected that students will take their own notes and complete these assignments to the best of their ability. Classwork/Homework may consist of warmups, exit tickets, and concept practice. Although due dates will be given, classwork/homework will not be formally graded.

Lab Investigations and Graded Assignments

Lab Investigations will happen as often as possible during the school year. As part of a Lab Investigation, students may complete pre-lab questions, design a procedure, record observations, make measurements, perform calculations, answer post-lab questions, and form a conclusion. Assignments other than routine classwork/homework may be graded as well. Lab investigations and Graded Assignments will be scored as \checkmark + (100), \checkmark (85), \checkmark - (70) or **Not Accepted** (missing). Lab Investigations and Graded Assignments will account for 30% of a student's term grade. Assignments that are submitted late may not be accepted.

Tests

Tests will be given at appropriate intervals during/after each unit, and I will always try to announce them at least one week in advance. Tests will be aligned with lesson objectives and may consist of multiple-choice questions, short-answer questions, and larger open response questions. After tests have been graded and returned to the class, test corrections and retakes may be allowed to recover missed points. Tests will account for 70% of a student's term grade.

Final Exam

A final exam or project will be assigned at the end of the school year and will account for 10% of a student's overall grade for the academic year.