Chemistry

2025-2026

Instructor: Bridget Upton

Contact Information

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Google Classroom (5th period) code: tiqvvftc

Course Overview

In Chemistry, students conduct laboratory and field investigations, use scientific practices during investigations, and make informed decisions using critical thinking and scientific problem solving. Students study a variety of topics that include characteristics of matter, use of the Periodic Table, development of atomic theory and chemical bonding, chemical stoichiometry, gas laws, solution chemistry, thermochemistry, and nuclear chemistry. Students will investigate how chemistry is an integral part of our daily lives.

Classroom Rules

- Be on time, on task & prepare to learn EVERYDAY
- Respect the teacher, the classroom, other students & yourself
- Be responsible for your own learning
- Clean up after yourself & your peers
- **Keep all personal electronics PUT AWAY along with smart watches, headphones, ipads, etc. They are not allowed out during school hours.**

Materials Needed for Class

- Composition Notebook
- Pen/pencil
- Optional - color pen/pencil, highlighters, glue stick/tape, scissors
- Google password
- Tissues
- Hand Sanitzers
- Hot glue sticks

Make up work

Class resources and assignments will be updated daily on the Google Classroom page for the class. If you are absent for any reason, you will be responsible for checking

Google Classroom to make up what is missed in class that day, or you are responsible for coming to me and asking for make-up work. I WILL NOT REMIND YOU.

Grading

Daily (30%)	Test (35%)	Lab (35%)
Notebook checks including "do now's", "exit tickets", notes, and in-class activities.	After each unit. Questions will include multiple-choice, short answer, and essay	Lab write-ups
Practice problems		Projects (one per unit)
Online quizzes		

Other requirements

a. Food and Drinks – NO FOOD OR FLAVORED DRINKS are allowed in the classroom or lab. I WILL ALLOW PRE-BOTTLED WATER (clean clear water) IN THE CLASSROOM ONLY. NO CUPS OR GLASSES! This is a school wide rule!!!!!!!!!!!!!!!

b. Group work – We will be working in groups. The groups may vary in size and may be different each time. Groups will be assigned. Do not complain about the people in your group. You will receive consequences for rude outbursts about students. I expect each member of the group to work hard and work well with each other. Work quietly so that everyone can concentrate on the task at hand.

c. Cell phones/electronic devices – Cell phones, cassette tapes, and other electronic devices are NOT allowed out. If a cell phone goes off in class, or an electronic device such as headphones, ipads, smart watches there will be consequences. SEE HANDBOOK FOR RULES

d. Cheating – Don't be a cheater! All involved will be given a grade of 0, and your parents will be contacted. THIS ALSO INCLUDES COPYING ANOTHER STUDENT'S HOMEWORK. Other consequences may apply. I will document the situation.

f. **Attitude –** In this class we will keep a positive attitude. I will not allow insults on other students, cursing, talking back to me, complaining about assignments or tests, (complaining will get you more work), and talking when you should be working. YOU WILL treat others as you want to be treated. We will become a classroom family that respects, helps and cares about one another.

g. Problems - If you have problems with another student or with me, then ask for an outside the door conference. I WILL NOT allow loud verbal outbursts in front of

any class of students. If you are sick or having a bad day, then let me know and we will make arrangements for you that day!!! ALWAYS have respect for others!!!!!

5. Ms./Coach Upton Grades Guarantee:
You have full control over your success. I will not alter any grade based on request or proximity to a desired level. Every decision you make throughout the year will lead to a predictable outcome with criteria that is consistent for every student.

6. Consequences: Discipline Plan

The discipline procedure for violations of classroom rules is given below:

Offense #1 Conference with student
Offense #2 Phone call to parent
Offense #3 Student will be assigned to detention
Offense #4 Referral to administrator

Students may be referred directly to an administrator for offenses such as fighting, dress code violations, possession of drugs or weapons, use of profanity, disrupting class learning, disrespect to teachers or other students, and other behavior that is detrimental to the learning environment of the classroom. If you receive three demerits in class you will have three days of lunch D-hall.

7. Student Rewards:

Extra visit time at the end of the week or day.

8. Grades

a. Your grades will be entered under three headings, daily grades (30%), test (30%), and projects and lab grades (40%). Parents are able to access your grades at all times. **If there is a "5" in the grade book it means the assignment is missing and there is still time to turn it in.**
If there is a "0" then time has passed for you to turn in the assignment.

TEKS RS Science Chemistry

Year at a Glance

1st Six Weeks
Unit 01: Matter in Motion [Gases + intro to thermodynamics]
TEKS: C.1.A, C.1.C, C.2.C, C.8.A, C.10.A, C.10.B, C.10.C, C.13.A
This unit bundles student expectations that address the behavior of gases and their relationship to the thermodynamic laws. Students will explain everyday examples that illustrate the four laws of thermodynamics, describe and calculate relationships among variables for an ideal gas, apply Dalton's law of partial pressure, define mole, and describe the postulates of the kinetic molecular theory.

Unit 02: And Matter is… [Atomic Structure]
TEKS: C.1.G, C.1.H, C.6.A, C.6.B, C.6.C
This unit bundles student expectations that address atomic structure and how we came to understand it. Students will construct models to show the development of the modern atomic theory over time and describe the structure of atoms and ions. They will then investigate the mathematical relationship between energy, frequency, and the wavelength of light and relate it to the quantization of energy in the emission spectrum.

2nd Six Weeks
Unit 03: Changes in the Nucleus [Nucleacar Chemistry]
TEKS: C.2.A, C.3.A, C.14.A, C.14.B, C.14.C
This unit bundles student expectations that address nuclear chemistry. Students will explore real-world examples of nuclear phenomena, compare fission and fusion nuclear reactions, and describe alpha, beta, and gamma nuclear reactions via balanced nuclear equations.

Unit 04: Types of Nuclei and Varied Electron Clouds [The Periodic Table]
TEKS: C.1.F, C.2.B, C.5.A, C.5.B, C.5.C, C.6.D, C.6.E
This unit bundles student expectations that address the Periodic Table and elements on the Periodic Table. Students will explain the development of the Periodic Table over time, predict the properties of elements in chemical families, calculate average atomic mass of elements using isotopic compositions, construct models to express the arrangement of electrons in atoms, and analyze and interpret elemental data to identify periodic trends.

Unit 05: Are Atoms Better Alone or Together [Chemical Bonding]
TEKS: C.3.C, C.7.A, C.7.C,C.7.D
This unit bundles student expectations that address chemical bonding. Students will predict bonding between elements based on periodic trends; analyze the properties of ionic, covalent, and metallic substances in terms of intramolecular and intermolecular forces; and classify and draw electron dot structures for molecules as explained by VSEPR theory.

3rd Six Weeks:

Unit 05: Are Atoms Better Alone or Together [Chemical Bonding]
TEKS: C.3.C, C.7.A, C.7.C,C.7.D
This unit bundles student expectations that address chemical bonding. Students will predict bonding between elements based on periodic trends; analyze the properties of ionic, covalent, and metallic substances in terms of intramolecular and intermolecular forces; and classify and draw electron dot structures for molecules as explained by VSEPR theory.

Unit 06: How Do You Talk About Bonds? [Chemical Bonds]
TEKS: C.3.B, C.7.B, C.8.D, C.12.A
This unit bundles student expectations that address chemical formulas. Students will name and write chemical formulas for ionic and covalent compounds, as well as acids and bases, using the International Union of Pure and Applied Chemistry (IUPAC) nomenclature rules. In addition, they will also differentiate between empirical and molecular formulas.

4th Six Weeks:
Unit 07: The Full Story of Bonding [Chemical Equations and Reactions]
TEKS: C.1.D, C.4.B, C.9.A, C.9.B
This unit bundles student expectations that focus on chemical equations and reactions. Students will interpret, write, and balance chemical equations and differentiate among different types of chemical reactions.

Unit 08: Qualifying Matter [The Mole]
TEKS: C.4.C, C.8.A, C.8.B, C.8.C
This unit bundles student expectations that focus on quantifying matter, including the use of the mole unit. Students will apply the concept of molar mass to convert between mole and grams, calculate the percent composition of compounds, and calculate the number of atoms or molecules in a sample of material using Avogadro's number.

Unit 09: Tracking and Counting [Stoichiometry]
TEKS: C.1.B, C.9.C, C.9.D
This unit bundles student expectations that continue to focus on quantifying matter through stoichiometry. Using balanced chemical equations, students will describe the concept of limiting reactants and perform stoichiometric calculations, including the determination of mass relationships, gas volume relationships, and percent yield.

5th Six Weeks:
Unit 09: Tracking and Counting [Stoichiometry]
TEKS: C.1.B, C.9.C, C.9.D
This unit bundles student expectations that continue to focus on quantifying matter through stoichiometry. Using balanced chemical equations, students will describe the concept of limiting

reactants and perform stoichiometric calculations, including the determination of mass relationships, gas volume relationships, and percent yield.

Unit 10: Tracking and Counting Energy [Thermochemistry]

TEKS: C.1.E, C.2.D, C.3.C, C.13.B, C.13.C, C.13.D

This unit bundles student expectations that address thermochemistry and energy transfers in chemical reactions. Students will classify processes as exothermic or endothermic, represent energy changes that occur in chemical reactions using thermochemical equations or graphical analysis, investigate the process of heat transfer using calorimetry, and perform calculations involving heat, mass, temperature change, and specific heat.

6th Six Weeks

Unit 11: Mixing things that Don't React [Solutions]

TEKS: C.2.C, C.3.A, C.4.A, C.11.A, C.11.B, C.11.C, C.11.D, C.11.E, C.11.F

This unit bundles student expectations that focus on water and solutions. Students will describe water's role in solutions, distinguish among the types of solutions, calculate the concentrations of solutions in units of molarity, and calculate the dilutions of solutions using molarity. In addition, students will investigate the general rules regarding solubility, predict the solubility of products of double replacement reactions, investigate how solubilities are influenced by temperature, and investigate how to increase rates of dissolution.

Unit 12: Mixing Things That May React [Acids and Bases]

TEKS: C.1.C, C.3.B, C.12.B, C.12.C, C.12.D, C.12.E

This unit bundles student expectations that address acids and bases. Students will define acids and bases, define and calculate pH, differentiate between strong and weak acids and bases, and predict products of acid-base reactions that produce water.

Dear Parent,

I am happy to have your child in chemistry this year, and I am excited about all that they will learn and experience! The class is designated as an honors class, so I want to make you aware of what this means for your chemistry student:

- Honor students are required to complete all projects (one per unit of study) demonstrating not only content knowledge but the use of 21st century and higher order thinking skills.
- Honor students will move at a faster pace; homework and unassigned practice problems may be necessary to master a concept.
- Honor students must maintain a B (80) average in the class. If a student makes below 80 on a six weeks grade report, then they will be placed on probation. If the student's semester average is below an 80, he or she will be removed from the class

I understand the honors requirements in Chemistry for my child,

_____

Student Name

_____

Parent signature Date

If you have any questions you may contact me at **uptonb@hooksisd.net.** Please list below the best way to contact you if necessary. Thank you!