

Groff HN Chemistry Syllabus 2025-2026

Course Description and Outline

This course is designed to introduce and immerse students in a journey of learning about the world around them - of the building blocks of matter, how they are put together, and how they interact with energy. This course uses the tools of mathematics and problem solving to help students gain a deeper understanding of these concepts. Skills gained this year in the proper use of laboratory equipment can be expanded on in the future at the college level.

How can you reach me?

Pirate Time:
Room 419 B and D days

Email: agroff@gehrhsd.net
School Phone: (609) 593-3560 Ext. #5215

Suggested Supplies

1. **Charged** Chromebook or Laptop
2. Notebook or binder for class notes
3. Pencil or pen
4. folder for handouts

Grading

60% Assessments (Tests, Labs, Quizzes, Projects)
40% Assignments

GEHRHSD Lateness Policy

-Completed assignments may be turned in for a minimum grade of 60%

Labs

Labs will be conducted throughout the year and relate to the topics as we learn them. In this class, every lab will count as a quiz or test grade. Lab activities will be conducted in groups, but the final laboratory assignment must be completed individually by each student. In order to receive full credit for a lab assignment, you must work with your group and participate in the activity. **Lab safety is extremely important.** You will be required to sign a safety contract and take a quiz to show me that you understand how to stay safe. Any student(s) who is found in violation of any lab safety rules will be asked to sit out from the activity. Excessively dangerous or careless behavior may result in a disciplinary referral.

Academic Honesty

It is expected that students will use genuine, sincere, and fair means for the accomplishment of the tests, tasks, or projects from which evaluations of progress will be determined. Students found plagiarizing, copying, fabricating, or attempting to deceive in any way will receive automatic zeros and have phone calls made to their guardians. Major assignments may be redone for a maximum grade of 60 as per school policy. Any student who continues to cheat will face further consequences.

Cell Phone Policy

- The use of cell phones is not permitted in academic classrooms, **unless allowed by your teacher for a specific reason**
- When cell phones are permitted, they may not be used to make phone calls, take pictures, or record video

Use of AI

- During the duration of this course, it is unlikely that we will come across a situation where we will have an opportunity to use AI technology (such as Chat GPT)
- It is the GEHRSD goal to teach responsible and appropriate use of these new technologies.
- If there is a situation where Chat GPT or other AI software could be useful as a tool, you **must ask your teacher** if you are allowed to use these resources.
- Keep in mind, even when you are permitted to use AI, just like checking the credibility of a website you must be careful to be sure the information generated by AI is correct. There have been many instances where Chat GPT delivered false information.
- Using AI tools and presenting the work as your own is a type of plagiarism, and is a direct violation of the Academic Integrity Policy of this district

Topics

Structure and Properties of Matter	How do subatomic particles of an atom affect its characteristics? How can we prove that particles too small to see exist? How do particles behave differently in a gas vs a liquid? How does adding or removing heat from a substance affect it at the molecular level?
Lab Procedures	How can I work safely in a chemistry lab? What is situational awareness, and why is it important? How can I take accurate measurements in the lab? What are significant figures and what do they tell us about a measurement?
Atomic Model History	How has our understanding of an atom evolved over time? What do we currently know about how an atom is put together? What were the most important discoveries in atomic theory? Why do different metal salts burn in different colors?
Periodic Table	What is the Periodic Table, and why is it so useful? How can we predict the properties of an element just by looking at its location on the Periodic Table?
Chemical Compounds	What are the ways in which atoms combine to form compounds? How can we name different chemical compounds?
Chemical Reactions	What are the different kinds of chemical reactions? What happens in a chemical reaction? How can a simple chart help us predict whether a chemical reaction will

	take place or not? What are ways to tell if a chemical reaction has happened?
Stoichiometry	How can I figure out the chemical formula of a compound, if I know how much of each element is in it?

Class Rules

1. Respect Yourself

- Take care of you - make choices that will set you up for success and never devalue yourself (you are worth it!)
- Charge your Chromebook at home, make sure supplies are all in your bag before you go to sleep, so you don't forget them
- Learn to limit cell phone use in class (red=no phones, green=phones permitted)

2. Respect Others

- Respect one another by raising your hand to respond, remain silent when someone else is speaking. Show respect for others' thoughts, questions, and responses. This is a safe space for everyone to grow and learn.

3. Respect the Learning Environment

- Treat school property with respect
- Be in your seat, ready to work when the bell rings
- Listen carefully to directions before an activity, so you know what to do without asking a second time and disrupting the flow of the lesson
- Your teachers are here to help you to learn and set out on a path to success, we are here for you so please do us the courtesy of showing respect
- BE SAFE - Horseplay and fooling around will not be tolerated. Do not bring any food or drink into the lab

Classroom Routine

- Start of Period - You will have a "do now" question, either on the board or on Google Classroom. Please come right in and get to work.
- Questions about missing work or general questions - Please ask me at the beginning or the end of class.
- Bathroom, Water, Nurse - Ask your teacher permission, then make a SmartPass to your desired destination. For passes other than bathroom or nurse, your teacher will need to approve your smart pass before you leave the room.
- **When Absent**, it is your responsibility to get the missing work from me and the missing notes from a classmate