

NOVATO UNIFIED SCHOOL DISTRICT  
Course Syllabus

Novato High School  
**School**

Chemistry  
**Course**

Mr. Niemann  
**Teacher**

[mniemann@nUSD.org](mailto:mniemann@nUSD.org) 415-789-6436  
**Contact Information**

Welcome to the Novato High School Science Department! We hope you will strive to reach your potential through hard work and dedication. Chemistry is a college preparatory lab science covering the topics of Atomic and Molecular Structure, Chemical Bonds, Conservation of Matter and Stoichiometry, Gases and their properties, Acids and Bases, Solutions, Chemical Thermodynamics, Reaction Rates, Chemical Equilibrium, Organic and Biochemistry, and Nuclear Processes. Success in this class will result from engaged reading, structured studying, problem solving and time-management.

**Course Goals:** Students will develop a strong academic foundation in Chemistry, have a firm understanding of how Chemistry relates to themselves and the world around them. They will learn how to use investigation and experimentation to develop clear processes to complete scientific inquiries about the information they learn.

The curriculum is based on the California State Standards for Chemistry. For access to the full text of the standards, go to **[www.nUSD.org](http://www.nUSD.org)**.

**Course Objectives:**

Students will understand...

- The periodic table displays the elements in increasing atomic number and shows how periodicity of the physical and chemical properties of the elements relates to atomic structure.
- Biological, chemical, and physical properties of matter result from the ability of atoms to form bonds from electrostatic forces between electrons and protons and between atoms and molecules.
- The conservation of atoms in chemical reactions leads to the principle of conservation of matter and the ability to calculate the mass of products and reactants.
- The kinetic molecular theory describes the motion of atoms and molecules and explains the properties of gases.
- Acids, bases, and salts are three classes of compounds that form ions in water solutions.
- Solutions are homogeneous mixtures of two or more substances.
- Energy is exchanged or transformed in all chemical reactions and physical changes of matter.
- Chemical reaction rates depend on factors that influence the frequency of collision of reactant molecules.
- Chemical equilibrium is a dynamic process at the molecular level.
- The bonding characteristics of carbon allow the formation of many different organic molecules of varied sizes, shapes, and chemical properties and provide the biochemical basis of life.
- Nuclear processes are those in which an atomic nucleus changes, including radioactive decay of naturally occurring and human-made isotopes, nuclear fission, and nuclear fusion.

**Text:** Modern Chemistry by Holt, Rinehart and Winston

**Progress Reporting** (*from Board Policy*)

Grades shall be reported at the end of each progress reporting period for all students. Progress reports will be mailed home and/or accessible to parents online approximately every five/six weeks. Whenever a student falls below a C- after the second Progress Report for either semester, the teacher shall arrange a conference with the student's parent/guardian and/or send a written report. (Board Policy 5121)

## **Classroom Policies**

### **SAFETY FIRST!**

Because this is a Lab Science, you will be required to follow class safety directions at all times. There are too many dangerous chemicals and expensive equipment not to take every precaution possible. If you choose to not follow these precautions you **will** sit out the lab and have no opportunity for make-up. Depending on the severity of the infraction you may also be suspended. Students who damage science equipment through neglect may be asked to reimburse the department for the cost of repairing or replacing that equipment.

### **Interactive Science Notebook:**

You will create and maintain an Interactive Science Notebook (ISN) this year for Chemistry. This is such an important part of this class we will be working in class to set this up for several of the first few days of class. I have purchased many notebooks at a discount and will be selling them to students who are not able to get a notebook by Friday. When you purchase the notebooks outside of class, please make sure to get the correct notebook (Three Subject (150 pages 8.5 x 11 in), College Ruled, Spiral Notebook with Poly cover). This ISN will become your most valuable resource for learning in this class. You will do all of your homework, take all of your notes and record all of your laboratory activities in your ISN. You are required to have a standard pencil, set of colored pencils, red pen, glue stick and a calculator everyday. These tools will be used to help you build your notebook that will assist you learning and understanding the concepts of chemistry. This notebook will be collected every unit and will be evaluated for completeness, depth of thought and reflection as well as accuracy. You will be required to write a reflection on your work and have a parent signature acknowledging your time and effort put into each unit.

### **Chemistry Target/Warm-up:**

There will be a Chemistry Target or Warm-up everyday. It is the first thing you will do each day when you arrive in class. You will need to write this in RED pen in your Interactive Science Notebook at the top of the designated page for that day.

### **Attendance/Tardiness:**

Attendance is essential in order to succeed in this class. You are responsible for all work if you are absent. You will have at least three classmates contact information as well as mine written down in your notebook. It is your responsibility to contact a classmate to find out what went on in class and get any information from them. Please let me know in advance of any absences on exam days or extended absences. Students may not make work missed during an unexcused absence. Unexcused absences will lead to a loss of credit, assignment points or a failing grade. Being late to class will not be tolerated. Every minute of class is crucially important. Each student is expected to be in their seat working on the target/warm-up when the tardy bell rings. Tardiness disrupts the class, the learning process, and is disrespectful to the teacher and the other students. Attendance and participation is ten percent of your grade. Every time you are tardy you will lose 5% of that grade. This means for every two tardies your grade will go down one full percent.

### **Laboratory Activities:**

Labs are a very important part of science. The textbook used in this class connects important laboratory techniques and concepts with “real-world” situations. I expect you to use your curiosity and problem solving skills to help you complete the labs. Labs missed due to excused absences must be made up within two weeks during my Thursday office hours. Labs missed due to unexcused absences may not be made up.

### **Homework:**

You will have homework on a regular basis in this class. The assignments will be turned in at the beginning of the class period on the date due. All homework must be hand-written. If you have an excused absence you have as many days as you were absent to make up the work missed. No late homework will be accepted unless it is done under my supervision during lunch or after school.

### **Computers:**

You will use a computer during this course. You have previously signed an Internet agreement for NHS. That agreement applies to this course as well. You will be expected to treat *all equipment* with care and may lose your computer privileges if you behave in any manner deemed inappropriate. Please do not hesitate to ask me for help using a computer program for class.

**Class Conduct:**

You are expected to be a positive, contributing member of this class. No hats, music players, cell phones or food will be allowed in the classroom. Any unnecessary interruptions will be dealt with as directed by the administration. Be kind, be courteous, be curious and be a participant.

**Academic Integrity:**

I want to make sure my policy on academic dishonesty is clear. **Academic Dishonesty in any form will not be tolerated.** The first offense will result in a zero on the assignment as well as the reduction of the student's semester grade by one full letter. For example if the student would have received an "A" in the course the highest grade they could achieve would be a "B". If there is a second offense the student will receive a failing grade for the semester and be removed from the class.

Academic Dishonesty is defined as follows according to Wikipedia.

Academic dishonesty or academic misconduct is any type of cheating that occurs in relation to a formal academic exercise. It can include:

- Plagiarism - The adoption or reproduction of ideas or words or statements of another person without due acknowledgment.
- Self Plagiarism - The submission of the same work for academic credit more than once without permission.
- Fabrication - The falsification of data, information, or citations in any formal academic exercise.
- Deception - Providing false information to an instructor concerning a formal academic exercise, e.g. giving a false excuse for missing a deadline or falsely claiming to have submitted work.
- Cheating - Any attempt to give or obtain assistance in a formal academic exercise without due acknowledgment.
- Sabotage - Acting to prevent others from completing their work. This includes cutting pages out of library books or willfully disrupting the experiments of others.

Please also feel free to review the Novato Unified School District Board Policy on Academic Integrity (BP 5131.93) at <http://www.nusd.org>.

**Grading policy:**

Your grade in this class will be based on four areas: Tests/Quizzes (40%), Labs/projects (30%), Homework/classwork (20%), and Attendance/Participation (10%). Tests may be graded on a curved scale, all other assignments are based on points. The overall grade for this course will be determined by the percentage of points you have earned versus the points available to earn. I will post grades on Aries for students and parents to stay updated. Please make sure you have your Aries login information so you can access your grades.

A = 90 – 100% B = 80 – 89% C = 70 – 79% D = 60 – 69% F = 59% and below

**Office Hours and Tutoring**

I am available Tuesdays and Wednesdays at Lunch, and by appointment. I am also available for questions via email. My office hours are also the times students will be allowed to make up lab work missed for an excused absence. There is also tutoring available every Tuesday, Wednesday, and Thursday in the Library after school.

Please read this carefully and have your parents or guardians read and sign the signature page. Your signatures mean that you have read and understand the expectations and the grading policy of this class. Your signatures will be kept on file.

The signature page of this syllabus is your first homework assignment. It will be worth full credit (10 points) if returned by Friday 8/23/13. If brought in early it is worth extra credit, if late it will lose 1 point per day.

I am looking forward to sharing this year in Chemistry with you.

Thank you,

Mr. Niemann

e-mail: [mniemann@nusd.org](mailto:mniemann@nusd.org)

voicemail: (415) 789-6436

# Chemistry Syllabus

## Student and Parent Agreement Form

By signing this I acknowledge that I have read and understand the requirements for this class as outlined in this syllabus.

**Student's name (printed):**

---

**Student's signature:**

---

**Student Email Address**

---

**Parent's name (printed):**

---

**Parent's signature:**

---

**Parent's Email address**

---

**Parent's Cell Phone**

---

**Date:**

---

Comments: