HONORS CHEMISTRY
HAMILTON HIGH SCHOOL

Raxha Bagdev	Sara Loutzenheiser	Stephanie Syverson
Rm. D208, (480) 883-5145	**Rm. D206, (480) 883-5143**	**Rm. D220, (480) 883-5159**
Bhagdev.Raxha@cusd80.com	**Loutzenheiser.Sara@cusd80.com**	**Syverson.Stephanie@cusd80.com**

Welcome to Chemistry! In this class, students will be consistently using critical thinking skills, writing, presentation skills, and collaborative learning as tools in learning chemistry. Below you will see a brief course description and my procedures for the classroom. Please read each section carefully, make sure you understand it and let us know if you have any questions.

COURSE DESCRIPTION:

Chemistry is a lab-based, inquiry-driven introduction to chemistry. Course goals are:

- **To become familiar with the major themes in chemistry.**
- **Learn to use scientific methodology in problem solving and report writing.**
- **To enhance critical thinking skills.**
- **To complete an independent Science Fair project demonstrating mastery of the scientific method.**

Students will conduct a variety of relevant and "hands-on" chemistry investigations. These investigations emphasize experimental design, data analysis and application of concepts learned. Technology is used extensively throughout the class as a tool for collecting, analyzing and presenting data.

MATERIALS:

The following materials are needed for chemistry:

- **Scientific Calculator (TI 30X series preferred, available at Staples, Office Max, Walgreen's, approximately $10.00)**
- **Binder paper, Pen, Dry Erase Marker, Pencil, and Eraser.**

CLASSROOM RULES:

Chemistry is a lab class. Therefore, the class must be very organized to ensure the safety of all students. The class rules are as follows:

1. Follow all school rules.
2. Follow all written and verbal instructions.
3. Do not leave your seat without permission.
4. Raise your hand to ask a question or make a comment.
5. Use appropriate voice volume.
6. Begin working on the warm up when the bell rings.

7. Do your own work or your own share of the work when working with a group or partner.
8. Do not talk when others are talking.
9. Keep bags under the tables (out of the walkway).
10. Keep your workspace clean and tidy. Solid waste goes in the trash cans. Liquid waste only in the sinks please.

The rules for labs and activities are as follows:

1. Always follow directions. If you do not understand the directions, ask the teacher.
2. Stay at your assigned lab station at all times.
3. Absolutely no food, gum or beverages at the lab stations.
4. The student should pay for any lab equipment broken due to negligence.
5. Specific Chemistry Lab Rules will be discussed the first week of class.

The consequences for not following rules in the classroom or lab will vary. In most cases, a verbal warning will be given and documented. If the problem persists, students will be sent out of the room and parents contacted. If the problem continues, the student will be sent to the office for disciplinary action. In the case of serious first offenses, students may be sent directly out of the room or to the office.

CLASSROOM POLICIES:

- **It is the student's responsibility to make up missed work and labs**.
- **Extra Help** is offered afterschool with all honors teachers.
- **Late Work:** Homework will be collected at the beginning of the period on the due date. Any work turned in after that time will be considered late. Work turned in the following day will receive a 10% grade reduction **PER DAY**. Once the assignment has been returned, students will not be able to turn in the assignment. Exceptions may be considered with prior communication with teacher.
- **After School Detention (ASD)** will be given for late assignments (not the result of an excused absence) and tardiness.
- **Missed Work:** Ms. Syverson's website has the agenda and homework posted. Work missed because of an excused absence must be submitted within a reasonable time period or the student will receive a zero for the assignment or lab. All **tests and quizzes** missed due to an excused absence must be made up after school within a week or at the teacher's discretion. Students are expected to take the tests and quizzes on scheduled days, an absence the class period before will not excuse one from taking the tests.
- **Cheating:**
  Students are expected to demonstrate honesty and integrity while in attendance at Hamilton High School. We expect each student to do his or her own work. This includes taking tests, completing homework and other class assignments. If submitted work is not a true reflection of student's own effort and ability, then the student has manifested unacceptable academic behavior and the assignment will receive a zero.
  The following actions will be considered cheating:
  a. Claiming credit for work not the product of individual effort.

b. Providing access to materials/information so that others may wrongly claim credit. (Both parties will receive zero credit)
c. Knowing about and tolerating observed dishonest behavior.
d. Since this is a laboratory course, we encourage students to work in cooperative groups. However, all lab reports submitted must be INDIVIDUAL and UNIQUE.

- **Phone Policy:**
  Cell phones are a great convenience in everyday life but become a headache in the educational setting! If a phone goes off in class or a student is using a phone in class, the phone will be confiscated and taken to security. Subsequent occurrences may result in a referral written to the appropriate grade level administrator. Additionally, any students found using a phone during a test will receive a **zero** on the test.

GRADING POLICIES:

You will be able to access your grade through STI. Please keep in mind it takes a few days for grades to be updated once new assignments have been entered. It is your responsibility to be aware of your grade at all times. Grades for the course will be computed based on a weighted average of your scores in the following categories:

Tests & Quizzes	60%
Lab Reports and Associated Quizzes	25%
Homework and Classwork	15%

Semester grades are cumulative will be calculated such that the Final Exam is 20%.

SAFETY:

Safety is a top priority in the Chemistry classroom. **All students must pass a lab safety test with a 75% or higher before working in the lab.** Students who do not observe or practice classroom and lab safety will not participate in lab.

MODELING CHEMISTRY CURRICULUM:

The three questions that guide our approach to understanding chemistry are:

1. How do we view matter? (Answer in terms of the particle you are using to describe matter)
2. How does it behave? (Provide an explanation of the behavior using this particle model)
3. What is the role of energy in the changes you observe?

Unit	Themes
Simple Particle Describing Matter	• Mass and Volume • Conservation of Mass (Matter) • Density • Physical Properties of Matter
Sticky Particle Energy and Kinetic	• States of Matter • Energy and Change

Molecular Theory	• Conservation of Energy • Behavior of Gases (Gas Laws)
Bonded Particle Describing Substances & the Electrical Nature of Matter	• Elements, Compounds and Mixtures • Atoms and Opposing Charges • Physical Properties of Molecular and Ionic Compounds
Counting Bonded Particles The Mole	• Relating how much mass to how many particles • Molar Ratios • Molar Mass of Elements and Compounds
Rearranging Bonded Particles Chemical Potential Energy (E_{ch})	• Chemical Reactions vs. Physical Reactions • Energy Changes in Chemical Reactions • Balanced Chemical Equations • Energy Bar Graphs
Relating "How Much to How Many" Bonded Particles Stoichiometry 1 & 2	• Proportional Relationships between Reactants and Products • Types of Reactions • Predicting Products • Energy and # of Particles
Particles = Atoms	• History of the atom • Internal Structure of the Atom • Nuclear Chemistry
Electrons – The Particles that Determine how Matter Behaves	• Electrons and the Behavior of Matter • How Electrons Get What They Want • Electron Configurations and Orbital Diagrams
Periodic Table	• Periodic Trends • Predicting Properties of Elements
Bonding and Molecular Architecture	• VSPER Theory of Molecular Compounds • Ionic and Covalent Bonding
Rates of Reaction and Chemical Equilibrium	• Factors Influencing Reaction Rate • Determining Chemical Equilibrium
Acids and Bases	• pH Scale • Properties of Acids and Bases • Neutralization Reactions and Titration

CONCLUSION:

Thank you for taking the time to read through this information. We hope we have successfully communicated with you the class policies that will be used throughout the next year. If you have any questions please feel free to ask us via phone or email, and our contact information is listed above.

Welcome to Chemistry and **GO HUSKIES**!

Please keep this letter in your Chemistry folder or notebook.

~~~~~~

Please fill out the information and sign below indicating that you have read the Chemistry information letter. Also, please initial where indicated. Thanks!!!

- Print student name ____

Class period _______________ Student ID __________________

Please initial that you have read these specific policies:

Extra help policy ________
Late work policy ________
Missed work policy ________
Cheating policy ________
Phone policy ________
Grading policy ________
Safety ________
Curriculum ________

Student Signature ____

- Print parent name ____

Parent/Guardian Work or Cell Phone #'s ___________________________________

Email(s) for contacting parent/guardian(s) about student progress __________________
____

Please initial that you have read these specific policies:

Extra help policy ________
Late work policy ________
Missed work policy ________
Cheating policy ________
Phone policy ________
Grading policy ________
Safety ________
Curriculum ________

My son/daughter has permission to participate in activities using the Internet.

_________ YES __________NO

Parent Signature ____

Comments:

____
____
____
____
~~~~~~