

## *Honors Chemistry Syllabus*

**Objective:** The goal of this class is to give you a broad overview of chemistry. The pace will be rapid. By the end of the year you should have a decent grasp of the tools and concepts necessary for AP Chemistry, AP Biology, or for further study in college.

**Notes:** Lecture notes will be available on the class website (PowerSchool) at the beginning of each unit. In many cases this will include both a PowerPoint and the corresponding Word document. You are expected to print these and bring them to class to fill in as we lecture. In special circumstances, you **may** be allowed to take notes on your laptop. I will not routinely print these. It is your responsibility to be prepared to take notes in a manner that is not disruptive to the rest of the class (e.g. don't ask the teacher to slow down so you can write everything on the slide when it's already available on the Word document). It is also highly recommended that you read through the notes/outline/textbook prior to the lecture so you will get more out of the lecture.

**Textbook:** Glencoe, *Chemistry: Matter and Change*, 2013

### **Course Outline (not necessarily in this order, but close to it):**

1. Introduction to Chemistry
2. Measurements and Calculations
3. Matter and Energy
4. Elements, Atoms, and Ions
5. Chemical Nomenclature
6. Chemical Reactions
7. Reactions in Aqueous Solutions
8. Chemical Composition
9. Chemical Quantities
10. Modern Atomic Theory
11. Chemical Bonding
12. Organic Chemistry
13. Gases
14. Phases of Matter – Liquids and Solids
15. Solutions
16. Rates & Equilibria
17. Acids & Bases
18. Nuclear Chemistry
19. Colligative Properties

**Labs:** We will be working in the lab frequently. Please dress appropriately for these days. No open-toed shoes or sandals. No bulky clothing that might catch on lab equipment, or catch on fire.

## Chemistry Classroom Policies & Procedures

### General Behavior

1. Only those items necessary for the lesson should be out. Cell phones, mp3 players, and other unnecessary items, if visible, will be confiscated and may be redeemed by your parent or legal guardian. Laptops will **NOT** be allowed for notetaking except by special accommodation.
2. Ask before getting up to use the restroom.
3. Class begins at the posted time. Please try to use break time for getting a drink, using the restroom, etc. You will wait until I dismiss the class before leaving.
4. For health safety reasons, food is strictly forbidden from the classroom. This applies to eating, as well as any open container of food. It is acceptable to have your lunch, for example, in your lunch bag or backpack.
5. Behave yourself. You will be expected to adhere to the Tesla STEM student code of conduct.

### Required Materials

1. Pencils with erasers
2. Scientific calculator – Doesn't have to be expensive. Just needs to have a "log" & "ln" buttons. You should expect to use your calculator every day. Chemistry is an applied math class. Additionally, **borrowing a calculator on a test will result in a 5% deduction on that test score.**
3. Cloth-bound **dedicated lab notebook** (a composition book) – all lab reports should be written in this.

### Laptop Policy & Expectations

1. Laptops will only be used at the direction of the teacher – mostly for lab work. Otherwise, computers must be turned off and put away.
2. Students are expected to bring their laptops to class every day **charged and ready to go**. If there is a problem with your laptop (it is lost, stolen, broken, forgotten, etc.) you must inform the teacher by email prior to class or bring in a signed note from your parents.
3. Students will be expected to be doing work for this class only, and will not be permitted to have any other windows open on their desktop other than what is necessary for this class.
4. Students are not permitted to access instant messaging programs, Skype, email, etc., while in class, unless otherwise directed by the teacher.
5. Failure to comply with these policies and expectations will result in consequences ranging from detention to having laptops temporarily confiscated.

### Lab Rules

1. Students will be assigned a lab station. Each lab team is responsible for cleaning the area after a lab. Part of your lab grade will be dependent on your participation in the activity and clean-up.
2. Safety procedures are to be followed at all times. See separate "Safety Contract".
3. Damaged or broken items of any kind resulting from carelessness or neglect will be paid for by those involved.
4. Dangerous and/or irresponsible behavior will result in removal from the room and a zero earned on the lab. Responsible behavior is an absolute must for personal safety and the safety of others.

### Assignments and Tests

1. **Lab reports** will be due no later than the day after completion of the lab, unless otherwise specified.
2. **Lab grades** will be based on your participation in the lab and the lab report. Participation includes being actively involved in the experiment, safety considerations, and cleaning all equipment and the lab station.
3. **Late work** will not be accepted. Exception will be made in the event of an absence – work must be turned in the day of your return to class. You will be responsible for checking with a classmate or on the class web calendar (PowerSchool) to see what you have missed.
4. **Attendance** is critical to learning in this classroom. Some things, like class discussions or labs, cannot be made-up. Therefore, I will follow the school policies concerning attendance, tardies, detention and loss of credit.
5. If you are absent it is **your** responsibility to find out what was missed. Upon return to class, you must arrange with your instructor to make-up any missed labs or exams.
6. **Tests** – Make-up tests will not be given, however, at the end of each semester your lowest test score will be dropped. Every effort will be made to schedule tests around school related activities but, it may be necessary to take a test before you leave for a planned absence. Make every effort to not miss tests.
7. **Academic fraud (cheating)** – Academic fraud is any attempt by a student to misrepresent his/her level of achievement or aid another student in such an attempt. **It is the ultimate crime in an academic setting, and will not be tolerated in any form.** Examples of cheating include: copying from a published source and/or the internet (plagiarism), copying from another student, letting another student copy your work,

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referring to unauthorized materials during a test, giving unauthorized assistance during a test, acquiring a copy of a test before you are scheduled to receive it, falsifying experimental data, purchasing papers or other work from students or the internet

There may be other examples of academic fraud. A good basic rule is as follows: **Under no circumstances is it permissible to transfer to your test, paper, or project something that has been written or stated by somebody else to receive credit for it.** If you are unsure whether something would be considered cheating, ask the instructor. You will not be penalized for asking such a question.

School policy will be followed as described in the student rights and responsibilities. A first offense will result in loss of credit for that assignment and notification of parents. A second offense, regardless of the subject, will result in loss of credit for the semester and parent notification. Students who are aware of cheating and do not report it or attempt to stop it will also be disciplined.

### Grading

Your grade will be based on tests, lab reports, homework, and in-class participation. All work is graded on a percent scale. Your overall grade will be calculated by multiplying by the following "weight factors:"

Assignment	Percent
Tests & Quizzes	50%
Labs	30%
Homework & Participation	20%

The grading scale is as follows:

Grade	% Score
A	90.0 – 100%
B+	87.0 – 89.9%
B	83.0 – 86.9%
B-	80.0 - 82.9%

Grade	% Score
C+	77.0 – 79.9%
C	73.0 – 76.9%
C-	70.0 – 72.9%
NC	00.0 – 69.9%

### Office hours

I am available Monday through Friday 6:30 – 7:30. I may also be available other times, by arrangement. Please make use of my help.

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## Please sign and return to the teacher.

I have read and understand the classroom policies and procedures for Honors Chemistry at Tesla – STEM.

Student Name: \_\_\_\_\_ Student Signature \_\_\_\_\_

Date \_\_\_\_\_

Parent Name: \_\_\_\_\_ Parent Signature: \_\_\_\_\_

Date \_\_\_\_\_