

## CHEMISTRY SYLLABUS

INSTRUCTOR: Mahua Chakraborty

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**Course Description:** The Chemistry course is designed like an Honors chemistry class to give a general instruction to chemical concepts and applying these concepts.

To provide sufficient information for a student to continue chemistry instruction at a college level.

To help clear many chemical concepts through hands on experiments and critical thinking labs.

**Text Book:** CHEMISTRY by Wilbraham, Staley, Matta, Waterman. We will have New Text Books this year. However we will be continuing with old books for some time before the textbooks arrive. You are required to bring books in the class daily except on testing days.

**Grading:** Students will be graded on quizzes, exams, homework, and projects/lab. Home work will carry 10-15 points each time. To get a full credit 50% and above answers must be correct. Tests each will carry 100 points. Distribution of points will be mentioned on the test. Labs/projects carry 25-30 points

**Content:** Main Topics that will be covered include:

### **1<sup>st</sup> nine weeks**

- Scientific measurement
- Atomic Structure and Electrons in Atom
- The Periodic Table
- Ionic and Covalent Bonding

### **2nd nine weeks**

- Chemical names and Formulas
- Chemical Quantities.
- Chemical Reactions.

### 3rd nine weeks

- Stoichiometry
- Behavior of gases
- Solutions

### 4th nine weeks

- Thermochemistry
- Reaction Rates and Equilibrium.
- Acids, Bases and Salts

Your success in this course will directly reflect on the amount of time and effort you put into it.

### Class room rules:

#### Here are some suggestions that may help you:

1. Come to class daily
2. Participate actively and ask questions in the class.
3. Keep notes about demonstrations and examples presented in the class.
4. Keep up with your work.
5. Be open to variety of learning styles and activities.
6. Attend Help labs as and when needed, without waiting to show up just before tests.
7. Cheating on tests by using phones or any other way will **STRICTLY result in a 0 grade.**
8. **Class Behavior: KEY word is RESPECT. Respect your teacher and friends!**
9. No eating, drinking, or chewing gum in the class. Before entering the class, make sure you trash your drink or spit out your gum. Only a bottle of water is allowed in the class as well as the lab.
10. Students are expected NOT **to bring any phones to their seat**, throw things, and tamper with equipment in the classroom or the lab.

### Materials:

#### Please bring the following to the class daily:

- Blue/Black pen, #2 pencil, and a ruler
- Scientific calculator/ TI 84 (Very important and bring to class daily)
- A notebook for taking note.
- Textbook

**Class Prerequisites:** Since Chemistry involves lot of mathematics it is important that you are currently enrolled in or have already passed Algebra II. Please talk to me personally if you have not met this requirement.

**Make up work policy:**

- If any HW is submitted after 10 days then the student will receive 50% credit (unless any proof of an emergency situation). If a HW is submitted late, then the student will receive 70% credit, provided it is not exceeding 10 days. (unless genuine emergency)
- Homework will be assigned frequently. **HOMEWORK WILL BE ASSIGNED ON CANVAS. FOR FULL CREDIT ON HW ALL RELATED MATH WORK MUST BE SHOWN.** Chemistry requires repetition in order to master difficult concepts and develop necessary problem-solving skills.

You will have tests **on Mon or Thursdays mostly.**

I look forward to teaching each and everyone enrolled in this class.

Chemistry Teacher

Mahua Chakraborty.