**Richardson Chemistry Syllabus**

**Required Materials:**

1. A *pencil* is required for all homework, labs and tests.

2. *Notebook paper* is required everday (use 81/2 by 11 inch).

3. A *red or blue pen* is required for grading homework.

4. A *Scientific Calculator*. A cell phone or any other device may not be used on tests and quizzes as a calculator.

**Behavior:**

1. *Be respectful* of teacher, classroom, and peers.

2. *Be alert and attentive* – do not put head down during class. Also, when you are in chemistry, you will be working on chemistry.

3. *Speak at the appropriate time* – If you have a question, raise your hand, and I will answer it the best I can. Do not talk when others are talking and allow others to hear by being quiet.

4. Compliance to student dress codes. Offenses will be referred to the Dean’s office.

5. *Do not throw any object* in the room.

6. Your *BOYD should be used only during approved times*. A cell phone is not a BOYD.

7. *Cell phone use is not permitted* in class. It is not a calculator, it is not a device. If it is out, it will be confiscated.

8. Absolutely *NO eating*. Repeat offenders will be written up. This is a school rule and will be enforced!

**Absences:** If you miss a day YOU ARE RESPONSIBLE for getting your make-up work. You will have one day to turn in make-up work for everyday you missed. Come in before or stay after school to get the help you need to catch up. If you miss 2 days in a row there will be a make-up assignment due each day following the day you return (I will not accept 2 assignments 2 days after you return).

**Cheating:** enforced as student handbook guidelines.

**Grading:**

1. School grading scale is in student handbook.

2. Semester grade = (Each nine week grade = 40% + Final Exam = 20%) Your grades each 9 weeks will be determined b raw points. The points breakdown is described below.

3. Grade Categories

**5-10%** ***Homework:*** nearly nightly assignments, generally due the next day. These assignments are usually between 5-10 problems and are designed to take 20-60 mins. On most homework days, there will be time in class to work on your homework. If you are regularly spending more than 30 mins at home a night working on homework, you may want to evaluate how you are spending your time in class. Homework will be checked in class the day after it was assigned. NO LATE HOMEWORK IS ACCPETED. I will drop your lowest homework score ever quarter.

**20-30% *Labs****:* Labs are usually planned over a 2 day period. 1 day to collect data, the other to spend in class time interpreting data and concluding. Both labs and homework are graded on accuracy. Labs are accepted late at a 10% per day penalty.

**60-75% *Tests****:* Tests over units are given roughly every two weeks. Tests are weighted to represent the size of the unit (a 7 day unit test might be worth 28 pts, a 10 day unit test 40 pts).

4. Extra Credit is rare. There will be Optional Credit occasionally on the end of a unit’s notes.

I have read and understand the policies for this class,

Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Chemistry, Semester I Rough Sequence**

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| --- | --- | --- | --- |
| **Unit :** | **Topics:** | **Labs:** | **Approximate Test Date:** |
| 1: Introduction to Chemistry | - Branches of Chemistry  - Atoms, Elements, Compounds  - Intensive, Extensive, Physical and Chemical Properties.  - Chemical vs Physical Changes  - Classification of Matter  - Periodic Table Basics | - Density of Water Lab  - Evidence of Chemical and Physical Changes Lab | Friday, Aug 18 |
| 2: Scientific Measurements | - Scientific Notation  - Accuracy vs Precision  - Qualitative vs Quantitative  - SI units and Conversions  - Significant Digits | - Accuracy Precision LabTivity  - Density Lab | Wednesday, Sept 6 |
| 3: Atomic Structure | - History of the Atom  - Law of Definite Proportions  - Mass Number, Atomic Number, Ions, Isotopes, Relative Abundance  - The Mole and Molar Conversions | - Atomic History Project  - Relative Abundance Lab  - Mole Lab | Friday, Sept 22 |
| 4: Electrons in the Atom | - Wavelength, Frequency, Speed of Light  - Plancks Constant  - Atomic Spectra  - Quantum Mechanical Model  - Orbits and Electron Configuration  - Orbital Notation  - Exceptions  - Valance e-/ Dot Diagrams | - Kodachromium Labtivity  - Flame Test Lab | Tuesday, Oct 10 |
| 5: The Periodic Table | - Mendeleev’s Periodic Table  - Dot Notation  - Atomic Trends | - Mendeleev’s Periodic Table Labtivity  - Periodicity Lab | ~ Friday, Oct 27 |
| 6: Ionic Bonding | - Dot Notation  - Ionic Bonding  - Empirical and Molecular Formulas |  | ~ Friday, Nov 3 |
| 7: Covalent Bonding | - Need Have Share Covalent Bonds  - VSEPR Molecular Shapes  - Inter Molecular Forces | - VSEPR Online Modeling  - Molecular Shapes Construction | ~ Thursday, Nov 16 |
| 8: Naming | - Binary Ionic  - Binary Covalent  - Polyatomic Ions  - Binary Acids  - OxyAcids  - Metals with multiple Oxidation States | - Formula Building Lab Labtivity | ~ Tuesday, Dec 5 |
| 9: Percent Composition | - Percent Composition Calculations |  | ~ Friday, Dec 8 |
| 10: Finals Review | - Finals Review |  | Finals 12/15-12/20 |