



I. Key Message/Expectations

Attendance is critical to this course. If you miss or are going to miss class, you are responsible for gathering what you miss from your peers. If you miss a Lab come see me and we will schedule a time when you can make it up. If you miss a test or exam, you will write it next class.

This classroom is a safe learning environment. As such I expect everyone to treat each other with respect and kindness.

As this course contains the possibility of working with hazardous chemicals there will be increased safety requirements. We will go over lab safety in a future class. **You will not be permitted to do any lab until you have written and passed a lab safety test with a minimum score of 100 %.**

I believe that all my students are capable of success in this course. I want you all to succeed so do not be afraid to ask for help, either from myself or your peers.

If you would like extra help, I will be available during lunch and after school.

II. Course Overview

The secondary science program is guided by the vision that all students, regardless of gender or cultural background, are given the opportunity to develop scientific literacy. The goal of scientific literacy is to develop in students the science-related knowledge, skills and attitudes that they need to solve problems and make decisions and, at the same time, to help students become lifelong learners who maintain their sense of wonder about the world around them.

III. Scope and Sequence

There will be four units in this course:

1. Review
 - a. Chemistry from science 10
 - b. Misconceptions and Misunderstandings
 - c. Lab Safety and WHMIS
2. Unit A - The Diversity of Matter and Chemical Bonding
 - a. Bonding theory
 - b. Molecular formulas
 - c. Molecular shapes
 - d. Intermolecular forces
 - e. Structures and properties of solids
3. Unit B - Forms of Matter: Gases
 - a. Properties of gases
 - b. Explanations of properties
 - c. Ideal gas law
4. Unit C - Matter as Solutions, Acids and Bases
 - a. Solutions
 - i. Solutions vs. Mixtures
 - ii. Concentration
 - iii. Preparation of solutions
 - iv. Solubility
 - b. Acids and Bases
 - i. Properties of acids and bases
 - ii. pH and pOH
 - iii. Indicators
5. Unit D - Quantitative Relationships in Chemical Changes
 - a. Stoichiometry
 - i. Interpreting reaction equations
 - ii. Stoichiometry
 - b. Chemical Analysis
 - i. Introduction to chemical analysis
 - ii. Limiting and excess reagents
 - iii. Titration analysis
 - iv. Titration curves and indicators

IV. Teaching Methodology

I will be teaching this course using a wide variety of methods. Some of which may include lectures, hands on learning, multimodal sources, group projects.

V. Assessment

Assessment breakdown:

- Coursework – 70%
 - Unit A - 20%
 - Unit B - 16%
 - Unit C - 32%
 - Unit D - 32%
- Final Exam – 30%
 - Lab Final - 45%
 - Written Final - 55%

Individual Unit Evaluation:

- Unit Exam – 40%
- Labs – 40%
- Quiz – 5%
- Question booklet – 15%

Marks will be uploaded to PowerSchool within two weeks after the due date.

In this classroom we will strive to enable students to demonstrate what they understand, know, and can do. Multiple and varied approaches will be used for assessment purposes, with special attention to the role of differentiated learning. Only summative or assessment of learning activities will be used to determine coursework grades.

VI. Resources and Materials

To every class bring:

- Writing Utensils
- Notes
- Paper (binder or notebook)
- Question Booklet
- Data Booklet
- Calculator (with a log function)