

Course Description/Rationale/Overview: This is the Senior Chemistry Course that continues the development of concepts from SCH 3U. SCH 4U prepares students for future studies at College or University. This course enables students to deepen their understanding of chemistry through the study of organic chemistry, energy changes, rates of reaction, chemical equilibrium, and atomic and molecular structure. Emphasis will be placed on problem solving and the importance of chemistry in daily life.

Class Requirements:

Text: Nelson Chemistry 11

(Replacement cost: \$ 85)

Recommended: Binder
Scientific calculator

Missed Tests and Late Assignments

Students are to be present for test dates. There must be a verified, valid reason when a test is missed. The teacher may provide an alternative opportunity for testing or record an "absent" for that test for legitimate absences.

All summative assignments will have a clear *Due Date*. Assignments that are handed after the *Due Date* will be accepted and assessed by the teacher if submitted prior to the deadline.

Where a student has not submitted enough work for the teacher to determine the student's level of achievement the report card will indicate that the student's work is incomplete and no grade will be assigned.

Assessment Strategies

- Each unit or strand of the course will be evaluated using summative evaluations. Students will also be expected to complete assessment activities of a formative nature in order to learn and to practice the specific expectations that will compose these summative evaluations. Examples of summative evaluations are tests, case studies, interviews, reports, presentations, seminars, debates, research and other writing assignments.

Achievement Categories

Knowledge/Understanding	34%
Thinking/Inquiry	15%
Communication	30%
Application	21%

Curriculum strands:

Matter and Chemical Bonding
Quantities in Chemical Reactions
Solutions and Solubility
Gases and Atmospheric
Chemistry
Hydrocarbons and Energy

Learning Skills:

- Works Independently
- Team work
- Organization
- Work Habits
- Initiative

Evaluation

This year's work will be evaluated by a number of assignments, activities, quizzes, reports, and tests that will involve aspects of the four Achievement Categories.

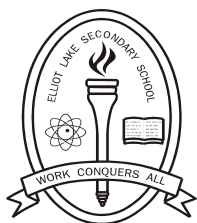
FINAL MARK

Year's Work: 70%

This portion will be based on daily work, assignments, labs, and tests

Final Summative Evaluation: 30%

There will be a final exam worth 30% of the total evaluation.



COURSE OUTLINE

Unit of Study	Curriculum Strands	Details
Unit 1 Classification of Matter	Matter and Chemical Bonding	The course starts with an overview of the classifications of matter. Chemical and physical changes and chemical and physical properties are also discussed.
Unit 2 Atomic Theory and Behaviour of Atoms	Matter and Chemical Bonding	The structure of the atom is discussed using historical references. We also look at why atoms behave the way that they do.
Unit 3 Types of Substances	Matter and Chemical Bonding	The structure and properties of substances in the real world are studied.
Unit 4 Nomenclature	Matter and Chemical Bonding	Nomenclature involves the writing of chemical formulas and the naming of chemical substances.
Unit 5 Moles and Equations	Quantities in Chemical Reactions	Balancing equations, measurement, and mole calculations are the topics of this unit.
Unit 6 Moles, Equations, and Gases	Gases and Atmospheric Chemistry	Properties and calculations involving gases are related to moles and equation concepts.
Unit 7 Moles, Equations, and Solutions	Solutions and Solubility	The dissolving process and solutions are related to previous concepts and calculations.
Unit 8 Hydrocarbons and Heats of Reaction	Hydrocarbons and Energy	Chemical potential energy and its role in reactions are discussed.