Colonel By S.S.
Course Outline
Chemistry, Grade 11, University
SCH3U

The assessment of learning skills

The development of sound learning skills is essential to the success of our students. Teachers and students will work together to understand and further the development of student learning skills in the areas of initiative, work habits, organization, team work, and independent work.

The course descriptor for SCH3U

This course focuses on the concepts and theories that form the basis of modern chemistry. Students will study the behaviours of solids, liquids, gases, and solutions; investigate changes and relationships in chemical systems; and explore how chemistry is used in developing new products and processes that affect our lives and our environment. Emphasis will also be placed on the importance of chemistry in other branches of science.

Determining the final mark

In secondary open level courses, the final mark is determined using the following procedure: term work comprises 70% of the final mark and end of year summative evaluations comprise 30% of the final mark.

Students will be assessed to determine how well they have achieved specific expectations for the course. A variety of methods including; self and peer assessment, observation, marking schemes, checklists, tests and rubrics will be used to asses the work.

Throughout the year, students will be assessed on curriculum expectations, receive feedback on learning, and be given opportunities to improve their performance. In the term grade, the evaluation of learning is as follows:

Evaluations	70 %
Summative	30 %

Towards the end of the course, students will complete a summative evaluation that will address the overall curriculum expectations for the various strands of the course. This task will be divided into smaller components for ease of completion. The total of the evaluation will comprise 30% of the final grade.

The overall curriculum expectations for SCH3U

Matter, Chemical Trends, and Chemical Bonding

By the end of this course, students will:
• demonstrate an understanding of the relationship between periodic tendencies, types of chemical bonding, and the properties of ionic and molecular compounds;
• carry out laboratory studies of chemical reactions, analyse chemical reactions in terms of the type of reaction and the reactivity of starting materials, and use appropriate symbols and formulae to represent the structure and bonding of chemical substances;
• describe how an understanding of matter and its properties can lead to the production of useful substances and new technologies.

Quantities in Chemical Reactions

By the end of this course, students will:
• demonstrate an understanding of the mole concept and its significance in the analysis of chemical systems;
• carry out experiments and complete calculations based on quantitative relationships in balanced chemical reactions;
• demonstrate an awareness of the importance of quantitative chemical relationships in the home or in industry.

Solutions and Solubility

By the end of this course, students will:
• demonstrate an understanding of the properties of solutions, the concept of concentration, and the importance of water as a solvent;
• carry out experiments and other laboratory procedures involving solutions, and solve quantitative problems involving solutions;
• relate a scientific knowledge of solutions and solubility to everyday applications, and explain how environmental water quality depends on the concentrations of a variety of dissolved substances.

Gases and Atmospheric Chemistry

By the end of this course, students will:
• demonstrate an understanding of the laws that govern the behaviour of gases;
• investigate through experimentation the relationships among the pressure, volume, and temperature of a gas, and solve problems involving quantity of substance in moles, molar masses and volumes, and the gas laws;
• describe how knowledge of gases has helped to advance technology, and how such technological advances have led to a better understanding of environmental phenomena and issues.

Chemical Reactions

- analyze chemical reactions used in a variety of applications, and assess their impact on society and the environment;
- investigate different types of chemical reactions;
- demonstrate an understanding of the different types of chemical reactions.