Sir Wilfrid Laurier Secondary School
Grade 11 University Chemistry – SCH3U

Course Description

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.

Strands and Subgroups

Matter and Chemical Bonding • classifying and measuring matter • atoms, elements and the periodic table • ionic and covalent bonding • polar covalent bonds and polar molecules • chemical formulas and naming	**Chemical Reactions** • chemical equations • types of reactions—synthesis, decomposition, single displacement, & double displacement • complete/incomplete combustion • ionic equations
Quantities in Chemical Reactions • Avogadro constant and the mole • percentage composition • empirical and molecular formulas • stoichiometry • percentage yield • percentage purity	**Solutions and Solubility** • types of solutions • factors that affect solubility • concentration of solutions • preparing solutions • predicting solubility • aqueous solutions and water quality • acid-base theories and reactions
Gases and Atmospheric Chemistry • states of matter and the kinetic molecular theory • gas laws for pressure, temperature and volume • gas applications • ideal gas law • gas law stoichiometry	

Evaluation

The final report card mark will be determined as follows:

Term Work – 70%	Summative 30%
Unit Tests Lab Reports Quizzes Classwork	Exam and/or Lab Test/Performance Task

Attendance & Missed Evaluations

Regular attendance is an integral part of learning. Students are responsible for completing all work missed due to absence. Students must complete the missed evaluation immediately upon return to school, during out-of-class time.

End-of-course evaluations, i.e. the summative activity and final examination are time-sensitive. Attendance is mandatory for these evaluations. Any absence will result in a mark of zero, unless validated by a doctor's certificate.

If a student participates in **academic fraud** (e.g. plagiarism in assignments/lab reports), he / she is deemed not to have met the expectations associated with that particular evaluation.

General Course Information

Students must bring the following materials to each class:

- textbook
- separate Chemistry binder (to hold notes, tests, quizzes, handouts)
- pencil case (to hold pencils, erasers, ruler)
- scientific calculator
- lined paper

Course Text: **Chemistry 11**, McGraw-Hill ($103.00, GST included).
The student will be issued a text, and will be responsible for the cost of replacement, or repair, if the text is lost or damaged.