



Durham District School Board  
Brooklin High School  
Science Department  
Course Outline: CHEMISTRY, Grade 12, University

Department Head: D. O'Neill

Teachers:

Course Code: SCH 4U (Credit Value: 1.0)

Prerequisite: SCH 3U1

***Overall Curriculum Expectations:***

Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information.

***Course Description:***

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, the structure and properties of matter, energy changes and rates of reaction, equilibrium in chemical systems, and electrochemistry.

***Course Strands:***

Scientific Investigation Skills, Organic Chemistry, Structure and Properties of Matter, Energy Changes and Rates of Reaction, Chemical Systems and Equilibrium, Electrochemistry

***Units of Study:***

Unit 1: Organic Chemistry  
Unit 2: Structure and Properties of Matter  
Unit 3: Energy Changes and Rates of Reaction  
Unit 4: Chemical Systems and Equilibrium  
Unit 5: Electrochemistry

***Teaching Strategies:***

A variety of teaching and learning strategies will be incorporated throughout the course.

***Assessment & Evaluation:***

Assessment and evaluation will encompass all four categories of achievement: **Knowledge and Understanding; Thinking/Inquiry; Communication; and Making Connections/Application.** This course will involve a number of assessment and evaluation strategies that will provide all students an opportunity to meet with success.

***Term Work: 70%***

Labs and Assignments	30%
Quizzes	10%
Tests	30%

***Final Summative: 30%***

Final Exam	30%
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***Learning Skills and Work Habits:***

The following Learning Skills and Work Habits are evaluated regularly using a scale of Excellent, Good, Satisfactory or Needs Improvement: **Responsibility, Organization, Independent Work, Collaboration, Initiative, Self-Regulation.**

***Textbook:*** Nelson, Chemistry 12 (replacement cost: \$80.00)

***Class requirements:*** 3-ring binder, scientific calculator, pen, pencil, ruler