

## Chemistry, Grade 12, University Preparation (SCH4U)

Colonel By Secondary School

This course enables students to deepen their understanding of chemistry through the study of organic chemistry, energy changes and rates of reaction, chemical systems and equilibrium, electrochemistry, and atomic and molecular structure. Students will further develop problem-solving and laboratory skills as they investigate chemical processes, at the same time refining their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in daily life, and on evaluating the impact of chemical technology on the environment.

**Prerequisite:** Chemistry, Grade 11, University Preparation

More detail on the course can be found on the internet at:

<http://www.edu.gov.on.ca/eng/document/curricul/secondary/grade1112/science/science.html#sch4u>

**Text:** Nelson Chemistry 12 (Replacement cost \$106)

<http://www.science.nelson.com/>

### Unit

Structure and Properties of Matter  
Organic Chemistry  
Energy Changes and Rates of Reaction  
Chemical Systems and Equilibrium  
Electrochemistry  
Final Assessment

### Approximate Timeline

Sept. 6 Mid Oct.  
Mid Oct. Late Nov.  
Late Nov. Mid Jan.  
Mid Jan. Early Apr.  
Early Apr. Late May  
End of year

### Evaluation

The weighting of the final mark is as follows:

70% Course work (tests, quizzes, lab reports and quizzes, assignments)

30% Year-end Summative Evaluation (5% Summative + 25% Exam)

Evaluations will draw from the following learning skills, with the approximate year-end weighting indicated below.

Individual evaluations will not necessarily include all of these learning skills.

35% Knowledge/Understanding

30% Inquiry (Thinking/Inquiring/Problem Solving)

15% Communication

20% Making Connections (Application)