

# NEPEAN HIGH SCHOOL

Science Department

## SCH 4U

Prerequisite: SCH 3U

Teacher Name: Schneider Student Name: \_\_\_\_\_



Textbook: Nelson Chemistry 12 Replacement Value: \$130.00 Assigned Text # \_\_\_\_\_

### 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. Students will further develop their problem-solving and investigation skills as they investigate chemical processes, and will refine their ability to communicate scientific information. Emphasis will be placed on the importance of chemistry in everyday life and on evaluating the impact of chemical technology on the environment.

### UNITS OF STUDY:

Unit 1	<i>Structure and Properties of Matter</i>	Chapters 3 & 4
Unit 2	<i>Chemical Systems and Equilibrium</i>	Chapters 7 & 8
Unit 3	<i>Electrochemistry</i>	Chapters 9 & 10
Unit 4	<i>Energy Changes and Rates of Reaction</i>	Chapters 5 & 6
Unit 5	<i>Organic Chemistry</i>	Chapters 1 & 2

### ASSESSMENT AND EVALUATION:

Category and Types of Assessment	Weight
<b>Knowledge &amp; Understanding</b> <ul style="list-style-type: none"><li>knowledge of facts and terms; understanding of concepts, principles, laws and theories; relationships between concepts and transfer of concepts to new contexts</li></ul>	24.5 %
<b>Thinking, Inquiry &amp; Problem Solving</b> <ul style="list-style-type: none"><li>use of skills and strategies in scientific inquiry, such as planning, performing, recording, analysing, interpreting and problem solving ; applications of technical skills and procedures; use of equipment and materials;</li></ul>	24.5 %
<b>Application</b> <ul style="list-style-type: none"><li>connecting science, technology, society and the environment</li></ul>	7 %
<b>Communication</b> <ul style="list-style-type: none"><li>communicating information and ideas with clarity and precision; using scientific terminology, conventions and SI units</li></ul>	14 %
<b>Summative</b> <ul style="list-style-type: none"><li>end of year summative project (rich performance task) 10% and final exam 20%</li></ul>	30%

### ADDITIONAL NOTES:

The Nepean Science Department follows the evaluation policies as outlined in the Student Agenda. Students are expected to care for the textbooks issued to them and to return them in good condition. Each student is required to bring to class pens and pencils, textbook and notebook, and a ruler, geometry set, graph paper and a scientific calculator. All assignments are to be written individually, unless otherwise stated by the teacher. Extra help for review, remediation or enrichment is readily available. This is best arranged by appointment. Your teacher will provide times when (s)he is available. Students must make arrangements to make-up a missed test or experiment. Assignments and reports are due at the beginning of class.