

# NEPEAN HIGH SCHOOL

Science Department

## SCH 4UR

Prerequisite: SCH 3UR / SCH 3U

Teacher Name: Houston

Student Name: \_\_\_\_\_



Textbook: Zumdahl Chemistry 7<sup>th</sup> ed. Replacement Value: \$130.00 Assigned Text # \_\_\_\_\_

### COURSE DESCRIPTION:

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. This course also will continue to cover the Advanced Placement Chemistry curriculum, begun in SCH3UR, which will allow for enrichment opportunities in subject material and laboratory activities. The curriculum document for SCH4U is available from: <http://www.edu.gov.on.ca/eng/curriculum/>

### UNITS OF STUDY:

Unit 8	Structure and Properties	Chapters 7 & 10
Unit 9, 10	Energy Changes and Rates of Reaction	Chapters 6 & 12
Unit 11, 12, 13	Chemical Systems and Equilibrium	Chapters 13, 14, 15
Unit 14	Electrochemistry	Chapters 17 & 16
Unit 15	Organic Chemistry	Chapter 22

### 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. Students are expected to behave in a responsible manner. They will be billed for any breakage that results from carelessness. All work to be marked must be typed or neatly handwritten in blue or black ink. Pencil is only permitted for diagrams. 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.

