



Westside Secondary School

Orangeville, Ontario, Canada



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www.ugdsb.on.ca/westside

Course: SCH 4C

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Course Description: This course builds upon concepts in the chemistry units of SNC1P and SNC2P, offering students a deeper understanding of chemical properties and processes and an opportunity to develop analytical skills in lab and research settings by investigating the properties and impacts of chemicals and their reactions.

Big Ideas: The curriculum in each unit targets “Big Ideas” that are laid out by Ontario’s Ministry of Education and adapted by Westside teachers. The following chart outlines the Big Ideas being explored and evaluated in each unit of this course. For more information on the overall course expectations, visit http://www.edu.gov.on.ca/eng/curriculum/secondary/2009science11_12.pdf.

Unit of Study	Big Ideas
Matter and Qualitative Analysis	<ul style="list-style-type: none">• The properties of matter can be predicted and analyzed qualitatively.• Substances can be identified based on their distinct properties.• Qualitative analysis of matter is used in many different fields of endeavour.
Organic Chemistry	<ul style="list-style-type: none">• Organic compounds have predictable chemical and physical properties determined by their respective structures.• Organic compounds can be synthesized by living things or through artificial processes.• Organic chemical reactions and their applications have significant implications for society, human health, and the environment.
Chemical Calculations	<ul style="list-style-type: none">• Relationships in chemical reactions can be described quantitatively.• Quantitative relationships of chemical reactions have applications in the home, workplace, and the environment.
Chemistry in the Environment	<ul style="list-style-type: none">• Air and water quality can be affected by both natural processes and human activities.• Quantitative relationships of chemical reactions can be used to assess air and water quality.
Electrochemistry	<ul style="list-style-type: none">• Oxidation and reduction are paired chemical reactions in which electrons are transferred from one substance to another in a predictable way.• The control and applications of oxidation and reduction reactions have significant implications for society and the environment.

Instructional Strategies: Westside teachers use a variety of instructional strategies to help students develop and improve skills in the following areas: character, citizenship, communication, critical thinking and problem solving, collaboration and teamwork, and creativity and imagination.

Achievement Categories: Student learning is assessed and evaluated in a balanced manner with respect to the following four interrelated categories of knowledge and skills.

Knowledge and Understanding
Thinking
Communication
Application

Assessment and Evaluation: Assessments for and as learning are used to improve student success by providing opportunities to demonstrate understanding of course expectations prior to the evaluation of learning. Evaluations of learning are where students demonstrate their understanding of Big Ideas and key expectations. Failure to complete an evaluation of learning may result in the credit not being granted because certain expectations of the course have not been met.

Term Work Evaluations: 70%
Matter and Qualitative Analysis Unit: Test and Lab
Organic Chemistry Unit: Test and Lab
Chemical Calculations Unit: Test and Lab
Chemistry in the Environment Unit: Inquiry Activity
Electrochemistry Unit: Test and Lab

Final Evaluation(s): 30%
Culminating Activity (6%)
Exam (24%)

Late Work

- Students are expected to complete all assigned work and submit it by the teacher's established due date. Every attempt will be made to encourage students to complete all assigned work on time so their grade represents their actual achievement. For late and missed summative assessments, please see the ***Westside Students' Contract for Missing Evidence of Learning***.

Safety Agreement

- All students will receive a safety agreement, will sign and return the UGDSB Student Safety Agreement.

Textbook

- Nelson Chemistry 12 College Preparation – replacement fee for a lost or damaged textbook is \$120

Electronic Devices

- The science department at Westside S.S. has a policy that no electronic devices (e.g. cell phones, tablets, iPods, mp3 players, etc.) are allowed during evaluations. For this reason, students are reminded to bring a scientific calculator when needed.

Classroom Rules

- Students are expected to follow the rules of conduct, as referenced on the school's web site: <http://www.ugdsb.on.ca/westside/>.

In addition to these general rules of Westside Secondary School, the rules for the science classroom are as follows:

- no food or drink of any kind is allowed in a science classroom
- respect the people, equipment, and furnishings of the science classroom
- immediately stop any activity and give your attention to the teacher when asked to do so
- summative evaluations of learning will not leave the classroom, but are available for students to discuss with the teacher