

New Westminster Online Learning School

Chemistry 11:

Course Description

This is a “toolbox” course introducing students to the language, computational skills, and foundational concepts of matter. It is a prerequisite for Chemistry 12.

Course Expectations

Students are expected to complete the first Module within 3 weeks of enrolling, to log in and make progress each week, and to finish the course within a 4–5-month period of time. They are expected to be in communication with their teacher when they have questions and if they need additional time. Students are expected to submit their own work, and to cite sources when using the work of others.

Enduring Understanding/Big Ideas

Students will focus on the following:

- Atoms and molecules are the building blocks of matter.
- The mole is a quantity used to make atoms and molecules measurable.
- Matter and energy are conserved in chemical reactions.
- Solubility within a solution is determined by the nature of the solute and the solvent.
- Organic chemistry and its applications have significant implications for human health, society, and the environment.

Specific Learning Outcomes

Curriculum details can be found at:

<https://curriculum.gov.bc.ca/curriculum/science/11/chemistry>.

Course Content

Unit 1	Introductory Concepts & Skills
Unit 2	Matter
Unit 3	Atoms & the Periodic Table
Unit 4	Names & Formulas
Unit 5	The Mole

Unit 6	More About Formulas
Unit 7	Chemical Reactions
Unit 8	Stoichiometry
Unit 9	Solution Chemistry
Unit 10	Organic Chemistry

Student Learning Activities and Strategies

All materials, lessons, and assessments are online and use a combination of text, short videos, interactive animations, links to websites, and practice questions and exercises to help students understand the concepts. Now, while the materials are online, it will still be important for students to keep an organized binder with notes taken from text and video lessons, handouts they might want to print, as well as their work for questions and exercises.

Assessment

Student understanding is assessed through assignments, quizzes, conversations with the teacher and module tests. Quizzes provide a way to check understanding and get feedback and help from the teacher. Most assessments can be completed from home. Students will be required to come to a supervised location to write two module tests.

Ministry assessment and reporting information can be found at:
<https://curriculum.gov.bc.ca/classroom-assessment>.

Evaluation

Your final mark is determined by the progress you have made in understanding key concepts and skills as demonstrated on assignments (~50%) and module tests (~50%) throughout the course.

Resources

All materials are online, so this means access to reliable high-speed internet is essential, and that students use a laptop, desktop, or Chromebook. No textbook or workbook is required.

A scientific (not graphing) calculator is required.