

New Westminster Online Learning School

Science 10:

Course Description

Science 10 involves using facts, theory, skills, and processes to study topics in biology, chemistry, physics, and the universe. Students will continue investigating some of these topics in Grade 11 courses such as Life Science 11, Chemistry 11, Physics 11, and Earth Science 11. Students are encouraged to take an investigative approach to learning science. The online version of this course allows students to work independently at the pace that best suits them while requiring careful time management and developing communication and thinking skills.

Course Expectation

Students are expected to complete the first assignment/project within 2 weeks of enrolling, to log in and make progress each week, and to finish the course within 5-months. 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.

Enduring Understanding/Big Ideas

Students will focus on:

- DNA is the basis for the diversity of living things.
- Energy change is required as atoms rearrange in chemical processes.
- Energy is conserved, and its transformation can affect living things and the environment.
- The formation of the universe can be explained by the big bang theory.

Specific Learning Outcomes

Curriculum details can be found at: <https://curriculum.gov.bc.ca/curriculum/>

Course Content

Module 1: Biology	How do mutations occur?
Module 2: Chemistry	In what ways do atoms rearrange during reactions?
Module 3: The Universe	What evidence supports the big bang theory?
Module 4: Physics	How do energy transformations affect the environment?

Student Learning Activities and Strategies

All materials, lessons, assignments, 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.

Assessment

There are module quizzes and tests that are written online. Students will submit their module assignments electronically via a drop box in the course. Each assignment will also include specific criteria for how students will be marked. There is NO midterm and NO final exam. Students may only submit one assignment/assessment per day. All assignments and quizzes may be submitted from home. The Module Tests require a password and will be done under the supervision of a teacher.

Evaluation

Learning Activity	Percentage of Final Mark
Various review quizzes	3% for each module, for a total of 12%
4 Module Assignments	5% each for a total of 20%
4 Module Quizzes	5% each for a total of 20%
4 Module Tests	12% each for a total of 48%
Total	100%

Resources

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