

Science, Grade 10

Academic

SNC2D

This course enables students to enhance their understanding of concepts in biology, chemistry, earth and space science, and physics, and of the interrelationships between science, technology, society, and the environment. Students are also given opportunities to further develop their scientific investigation skills. Students will plan and conduct investigations and develop their understanding of scientific theories related to the connections between cells and systems in animals and plants; chemical reactions, with a particular focus on acid–base reactions; forces that affect climate and climate change; and the interaction of light and matter.

Prerequisite: Science, Grade 9, Academic or Applied

Big Ideas

Biology

- Plants and animals, including humans, are made of specialized cells, tissues, and organs that are organized into systems.
- Developments in medicine and medical technology can have social and ethical implications.

Chemistry

- Chemicals react with each other in predictable ways.
- Chemical reactions may have a negative impact on the environment, but they can also be used to address environmental challenges.

Earth and Space Science

- Earth’s climate is dynamic and is the result of interacting systems and processes.
- Global climate change is influenced by both natural and human factors.
- Climate change affects living things and natural systems in a variety of ways.
- People have the responsibility to assess their impact on climate change and to identify effective courses of action to reduce this impact.

Physics

- Light has characteristics and properties that can be manipulated with mirrors and lenses for a range of uses.
- Society has benefited from the development of a range of optical devices and technologies.

Fundamental Concepts Covered in This Course (see also page 5)

Fundamental Concepts	Biology	Chemistry	Earth and Space Science	Physics
Matter		✓		
Energy		✓	✓	✓
Systems and Interactions	✓		✓	
Structure and Function	✓			✓
Sustainability and Stewardship	✓	✓	✓	✓
Change and Continuity	✓		✓	