



Grade 9

Ontario Curriculum: Science Course (SNC1W)

This course aims to help students deepen their understanding of concepts in biology, chemistry, physics, and Earth and space science, as well as learn how to connect science to technology, society, and the environment.

Expectations	Key Concepts/Big Ideas
A. STEM Skills, Careers, and Connections	
 apply scientific processes and an engineering design process in their investigations to develop a conceptual understanding of the science they are learning, and apply coding skills to model scientific concepts and relationships analyse how scientific concepts and processes can be applied in practical ways to address real-world issues and in various careers, and describe contributions to science from people with diverse lived experiences 	 scientific research scientific experimentation engineering design coding
B. Biology – Sustainable Ecosystems and Climate Change	
 assess impacts of climate change on ecosystem sustainability and on various communities, and describe ways to mitigate these impacts demonstrate an understanding of the dynamic and interconnected nature of ecosystems, including how matter cycles and energy flows through ecosystems 	 environmental sustainability dynamic equilibrium of ecosystems cycling of matter flow of energy earth's four spheres climate change
C. Chemistry – The Nature of Matter	
 assess social, environmental, and economic impacts of the use of elements, compounds, and associated technologies demonstrate an understanding of the nature of matter, including the structure of the atom, physical and chemical properties of common elements and compounds, and the organization of elements in the periodic table 	 atoms matter elements (atomic structure & properties) compounds periodic table
D. Physics – Principles and Applications of Electricity	
 assess social, environmental, and economic impacts of electrical energy production and consumption, and describe ways to achieve sustainable practices demonstrate an understanding of the nature of electric charges, including properties of static and current electricity 	 electrical energy renewable charges energy non-renewable energy sustainable practices electrical charges static electricity current electricity
E. Earth and Space Science – Space Exploration	
 evaluate social, environmental, and economic impacts of space exploration and of technological innovations derived from space exploration demonstrate an understanding of the components, characteristics, and associated phenomena of the solar system and the universe, and the importance of the Sun to processes on Earth 	 space solar system exploration universe, sun, and earth innovations
Adapted from The Ontario Secondary Curriculum, Grade 9: Science Course - De-streamed (2022). https://www.do	cp.edu.gov.on.ca/en/curriculum/secondary-science/courses/snc1w/strands