

SOUTH CARLETON HIGH SCHOOL

Ottawa-Carleton District School Board

COURSE OUTLINE

SNC1P - GRADE 9 Applied Science

Credit Value: 1 credit Hours: 110 Prerequisite: none

Expectations

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

Big Ideas

Unit Title	Science Focus For Learning Expectations
Biology: Sustainable Ecosystems and Human Activity	Students will assess the impact of human activities on the sustainability of terrestrial and/or aquatic ecosystems, and evaluate the effectiveness of courses of action intended to remedy or mitigate negative impacts; Students will investigate factors related to human activity that affect terrestrial and aquatic ecosystems, and explain how they affect the sustainability of these ecosystems; Students will also demonstrate an understanding of the dynamic nature of ecosystems, particularly in terms of ecological balance and the impact of human activity on the sustainability of terrestrial and aquatic ecosystems.
Chemistry: Exploring Matter	Students will analyze how the properties of common elements and/or simple compounds affect their use, and assess the social and environmental impact associated with their production or use; Students will investigate, through inquiry, physical and chemical properties of common elements and simple compounds; Students will demonstrate an understanding of the properties of common elements and simple compounds, and general features of the organization of the periodic table.
Earth and Space Science: Space Exploration	Students will analyze the major challenges and benefits of space exploration, and assess the contributions of Canadians to space exploration; Students will investigate the properties of different types of celestial objects in the solar system and the universe; Students will demonstrate an understanding of major astronomical phenomena and of the principal components of the solar system and the universe.
Physics: Electrical Applications	Students will assess the major social, economic, and environmental costs and benefits of using electrical energy, distinguishing between renewable and non-renewable sources, and propose a plan of action to reduce energy costs; Students will investigate, through inquiry, the properties of static and current electricity and the cost of the consumption of electrical energy; Students will demonstrate an understanding of the concepts and principles of static and current electricity.

*NOTES: a. Specific learning expectations are available for each unit of study. b. The sequence of topics may not be exactly as listed above.

Accommodations for Exceptional Students

The Science department makes every effort to accommodate the identified needs of exceptional (IPRC'd) students and will attempt to differentiate curriculum delivery methods, student modes of expression, and assessment methods as recommended by the student's individual education plan (IEP).

Career Planning

The Science department makes every effort to ensure that students are aware of career opportunities related to various fields of science under study, and describe the contributions of scientists, including Canadians, to those fields.

Technology and Textbooks

The school will supply all laboratory resources and materials.

Textbook: Science 9 (Nelson) replacement cost = \$68.00

Evaluation

Term Evaluations (70%)	Summative Evaluation (30%)
Students will be evaluated according to the overall expectations of the Ontario curriculum. Assessment tools include both summative and formative tasks including but not limited to; tests/quizzes, assignments, projects, lab reports, skill based performance tasks and rich assessment tasks	<i>The exam portion of the summative will occur during the exam period in Jan/Jun and will evaluate the whole semester's work. All students must be present unless a medical certificate is provided.</i> <i>Project or assignment summative evaluation will be completed before the exam period begins.</i>

More information on South Carleton High School's policy on Assessment and Evaluation, on Academic Integrity, on punctuality, absenteeism and examinations can be accessed on our school website.