

**SOUTH CARLETON HIGH SCHOOL**  
**Ottawa Carleton District School Board**  
**COURSE OUTLINE**

**SNC2D – GRADE 10 Academic Science**

**Credit Value: 1 credit      Hours: 110      Prerequisite: SNC1W**

**Expectations**

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 acids and bases; forces that affect climate and climate change; and the interaction of light and matter.

**Big Ideas**

Unit Title	Science Focus For Learning Expectations
<b>Biology:</b> Tissues, Organs and Systems of Living Things	<ul style="list-style-type: none"> <li>● Plants and animals, including humans, are made of specialized cells, tissues and organs that are organized into systems.</li> <li>● Developments in medicine and medical technology can have social and ethical implications.</li> </ul>
<b>Chemistry:</b> Chemical Reactions	<ul style="list-style-type: none"> <li>● Ionic and molecular compounds have different general characteristics.</li> <li>● Chemicals react with each other in predictable ways.</li> <li>● Acids and bases have similarities and differences and a predictable reaction when combined.</li> <li>● Chemical reactions may have a negative impact on the environment, but they can also be used to address environmental challenges.</li> </ul>
<b>Earth and Space Science:</b> Climate Change	<ul style="list-style-type: none"> <li>● Earth’s climate is dynamic and is the result of interacting systems and processes.</li> <li>● Global climate change is influenced by both natural and human factors.</li> <li>● Climate change affects living things and natural systems in a variety of ways.</li> <li>● People have the responsibility to assess their impact on climate change and to identify the effective courses of action to reduce this impact.</li> </ul>
<b>Physics:</b> Light and Geometric Optics	<ul style="list-style-type: none"> <li>● Light is produced by two distinct processes.</li> <li>● Light has characteristics and properties that can be manipulated with mirrors and lenses for a range of uses.</li> <li>● Society has benefited from the development of a range of optical devices and technologies.</li> </ul>

*\*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**

The school will supply all necessary laboratory resources and materials.

**Evaluation**

Term Evaluations (70%)	Summative Evaluation (30%)
Students will be evaluated according to the overall expectations of the Ontario curriculum. <i>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>	<i>The summative project or assignment will require understanding of much of the course material and 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.