

**Sir Wilfrid Laurier Secondary School**  
**Grade 10 Applied Science – SNC2P**  
**1 credit**

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**Course Description**

This course enables students to develop a deeper understanding of concepts in biology, chemistry, earth and space science and physics; to develop further their practical skills in scientific investigation; and to apply their knowledge of science to real-world situations. Students will design and conduct investigations into everyday problems and issues related to biological systems, chemical reactions, climate change and the interaction of light and matter.

**Strands and Subgroups**

<b>Tissues, Organs and Systems</b> <ul style="list-style-type: none"><li>• properties and functions of cells</li><li>• human systems – respiratory, circulatory, and digestive</li><li>• dissection (in the lab or computer-simulated) of an animal</li><li>• health problems and technologies used for diagnosis and treatment</li></ul>	<b>Light and Applications of Optics</b> <ul style="list-style-type: none"><li>• light and colour</li><li>• optical technologies</li><li>• properties of light and its behaviour in mirrors and lenses</li><li>• types of light emissions</li></ul>
<b>Chemical Reactions</b> <ul style="list-style-type: none"><li>• household chemicals and WHMIS</li><li>• ion formation</li><li>• naming binary and polyatomic compounds</li><li>• balancing chemical reactions</li><li>• types of chemical reactions</li><li>• acids, bases and pH</li></ul>	<b>Earth's Dynamic Climate</b> <ul style="list-style-type: none"><li>• effects of human activity on climate change</li><li>• effects of climate change on living things</li><li>• investigate factors that impact climate change</li></ul>

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**Evaluation**

The final report card mark will be determined as follows:

<b>Classwork</b>	<b>70%</b>	<b>Summative</b>	<b>30%</b>
Consisting of unit tests, lab activities, projects, presentations, and/or other class assignments.		Exam and/or Performance Task	

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## Attendance & Missed Evaluations

Regular attendance is an integral part of learning. Students are responsible for completing all work missed due to absence. Students must complete the missed evaluation immediately upon return to school, during out-of-class time.

End-of-course evaluations, i.e. the summative activity and final examination are time-sensitive. Attendance is mandatory for these evaluations. Any absence will result in a mark of zero, unless validated by a doctor's certificate.

If a student participates in **academic fraud** (e.g. plagiarism in assignments), he / she is deemed not to have met the expectations associated with that particular evaluation.

A mark of zero will be given for late assignments/labs/projects that exceed the limits as set out in the school policy.

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## General Course Information

*Students must bring the following materials to each class:*

- text/workbook will be provided free of charge.  
    **\*\*In the event the student loses the text/workbook there is a replacement fee of \$15\*\***
- separate Science binder (to hold notes, tests, quizzes, handouts)
- pencil case (to hold pencils, erasers, ruler)
- scientific calculator
- lined paper
- graph paper

There is no fee for this course. There is a dissection component to the course and students can choose to do a "real" dissection or a "virtual" dissection. The specimens may include a worm, frog, and/or eye.

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