



SPH 4C  
PHYSICS  
Grade 12 College  
2016-17

### General Course Information

Prerequisite(s):	Science, Grade 10 Academic, SNC2D or Grade 10 Applied Science SNC2P
Teacher:	_____ (Science office, 416-395-3290 ext 20095)
Department:	Science
Assistant Curriculum Leader:	S. Evans, K. Fischer
Extra Help:	Available upon request
Textbook and Replacement Cost:	Physics 12 College (Nelson), \$100
Material Required:	Textbook

### Course Description

This course develops students' understanding of the basic concepts of physics. Students will explore these concepts with respect to motion; mechanical, electrical, electromagnetic, energy transformation, hydraulic, and pneumatic systems; and the operation of commonly used tools and machines. They will develop their scientific investigation skills as they test laws of physics and solve both assigned problems and those emerging from their investigations. Students will also consider the impact of technological applications of physics on society and the environment.

Further information about this course can be found at

<http://www.edu.gov.on.ca/eng/curriculum/secondary/science1112curr.pdf>

### Course Information

Strands of Study (Units)	Approximate Number of Lessons
Skills	5
Electricity and Magnetism	12
Motion and its Applications	15
Mechanical Systems	15
Energy Transformations	12
Hydraulics and Pneumatics	12

### Teaching Strategies

You will have opportunities to learn and be assessed (formative assessment) before evaluations. List of evaluation strategies which may be used (but are not limited to) are: quizzes, tests, problem-sets, laboratory activities, hands-on activities, independent study, problem-based learning, role-plays, and simulations.

### Assessment and Evaluation:

To promote student success, ongoing assessment and feedback is given regularly to the students. A variety of assessment and evaluation strategies are used in this course. Expectations are evaluated based on the provincial curriculum expectations and the strands and/or categories outlined in the ministry document.

Evaluation of the achievement of the overall curriculum expectations is based on the achievement chart for science. The achievement chart for science can be found at [www.edu.gov.on.ca](http://www.edu.gov.on.ca). Guidelines are consistent throughout the province. Marks are weighted according to the achievement chart categories (Knowledge/Understanding, Thinking/Inquiry, Application and Communication)



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Each student's term mark will be in the form of a percentage grade based on their achievement in the following categories:

Knowledge/Understanding	30%
Application	25%
Thinking/Inquiry	25%
Communication	20%

The breakdown of the final mark is as follows:

Term Evaluation	70%
Final Evaluation	20%
Culminating Project	10%

The final will be completed during the exam period.

In addition to students' performance in the achievement categories, students will also be assessed on their performance in the following learning skills:

- Responsibility
- Organization
- Independent Work
- Collaboration
- Initiative
- Self-Regulation

*For specific policies on assessment and evaluation, and academic honesty, please refer to School Procedures in the student agenda.*