

## ADDITIONAL COURSE INFORMATION FOR PARENTS – REVISED 2012

### YORK REGION DISTRICT SCHOOL BOARD UNIONVILLE HIGH SCHOOL

**Department:** Science  
**Course Code:** SNC2D  
**Grade:** 10  
**Credit Value:** 1.0  
**Instructor(s):** \_\_\_\_\_

**Course Title:** Science  
**Course Type:** Academic  
**Prerequisite:** SNC1D  
**Department Head:** Mr. Fung  
**Regional Subject Head:** Nathalie Rudner

**Ministry Guideline:** The Ontario Curriculum Grades 9 & 10 Science – Revised 2008

**Course Description:** 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 acid-base reactions; forces that affect climate and climate change; and the interaction of light and matter.

**Resources:** ON Science 10. McGraw -Hill    Cost: approximately \$85 (or current market value)

#### ***Assessment and Evaluation:***

<b>Knowledge</b>	<b>21%</b>
<b>Thinking and Inquiry</b>	<b>21%</b>
<b>Communication</b>	<b>14%</b>
<b>Application</b>	<b>14%</b>
<b>Summative Activity</b>	<b>5%</b>
<b>Final Exam</b>	<b>25%</b>

**Assessment and Evaluation Styles:** tests, quizzes, projects, lab reports, presentations, assignments

**Teaching Strategies:** direct instruction, computer simulation, group work, inquiry activities, independent learning, stations, lecture, laboratory activities

**Goals of the Secondary Science Program** outline the overall skills, knowledge and attitudes students will develop.

1. to relate science to technology, society, and the environment
2. to develop the skills, strategies, and habits of mind required for scientific inquiry
3. to understand the basic concepts of science

*Curriculum Strands in SNC2D1 and accompanying "Big Ideas" guide our focus on larger concepts, principles, and processes.*

**Strand A: Scientific Investigation Skills**

- Scientific experiments are initiated, planned, and performed according to the conventions of the cycle of proof.
- The results of scientific research are recorded, analysed, interpreted, and communicated according to a standard format.

**Strand B: Biology**

- Plants and animals, including humans, are made of specialized cells, tissues, and organs that are organized into systems.
- Developments in medicine and medical technology can have social and ethical implications.

**Strand C: Chemistry**

- Chemicals react with each other in predictable ways.
- Chemical reactions may have a negative impact on the environment, but they can also be used to address environmental challenges.

**Strand D: Earth and Space Science**

- Earth's climate is dynamic and is the result of interacting systems and processes.
- Global climate change is influenced by both natural and human factors.
- Climate change affects living things and natural systems in a variety of ways.
- People have the responsibility to assess their impact on climate change and to identify effective courses of action to reduce this impact.

**Strand E: Physics**

- Light has characteristics and properties that can be manipulated with mirrors and lenses for a range of uses.
- Society has benefited from the development of a range of optical devices and applications.