



SCIENCE DEPARTMENT

COURSE: Grade 10 Applied Science

COURSE CODE: SNC2P0

OVERARCHING LEARNING GOALS

Scientific Investigation and Skills and Career Exploration <ul style="list-style-type: none"> • Relate science to technology, society, and the environment • Acquire skills, strategies, and habits of mind required for scientific investigation • Understand the basic concepts of science 	
Tissues, Organs, and Systems <ul style="list-style-type: none"> • Understand all animals are made of specialized cells, tissues, and organs that are organized into systems. • Understand that although technology and chemicals can be used to improve human health, they can also constitute a health hazard. 	Earth's Dynamic Climate <ul style="list-style-type: none"> • Understand global climate change is affected by both natural and human factors. • Relate that climate change affects living things and natural systems in a variety of ways.
Chemical Reactions and Their Practical Applications <ul style="list-style-type: none"> • Understand the concept that chemicals react with one another in predictable ways • Understand chemical reactions are a necessary components of chemical products and processes used in home and workspace. 	Light and Applications of Optics <ul style="list-style-type: none"> • Relate how a wide range of technologies utilize the properties of light and colour. • Understand that the behavior of light depends on the materials with which it interacts. • Understand that light is a form of energy, produced from a variety of sources, and can be transformed into other useful forms of energy.

SUCCESS CRITERIA

Scientific Investigation Skills and Career Exploration

- I can accurately collect, record, analyze and communicate lab results.
- I can use lab equipment properly and safely.
- I can use appropriate terminology, symbols and units related to scientific concepts and processes.

Tissues, Organs, and Systems

- I can understand how animals, including humans, are organized into cells, tissues, organs, and body systems
- I can understand that cell division and specialization are involved in growth, repair and reproduction, and that normal body functions can go wrong when disease like cancer develop.
- I can create a realistic scenario about an illness or injury, and suggest how lifestyle changes such as healthy eating and exercise can help in the person's recovery.

Chemical Reactions and Their Practical Applications

- I can identify important chemical reactions in the home and workplace.
- I can relate how chemical reactions involving common chemicals can affect my health and the environment.
- I can understand how chemical reactions are involved in many of the consumer products we use.

Earth's Dynamic Climate

- I can understand how the effects of human activity on climate change, and the effects of climate change on living things and natural systems.
- I can explain how various natural and human factors contribute to climate change and global warming.
- I can relate to how various natural and human factors can have an impact on climate change and global warming.

Light and Applications of Optics

- I can describe how light and colour are used in technologies that affect society.
- I can predict the behaviour of light in different situations, based on light's properties.
- I can describe how we see colour.

ASSESSMENT & EVALUATION

TERM EVALUATION – 70%

Assessment and evaluation in this course will be based on provincial curriculum expectations. Evaluation throughout the course and the final evaluation will incorporate four broad categories:

Knowledge and Understanding	Thinking/ Inquiry	Communication	Application
-knowledge of content -understanding of content	-planning and performing lab investigations -problem solving, critical thinking processes and skills	-expression and organization of ideas and information -use of conventions and terminology	-making connections to society, technology and the environment -transfer of knowledge and skills to unfamiliar contexts

Students will also receive descriptive feedback as part of the learning process which may not be assigned a mark. More detailed information regarding the Port Credit Secondary School Assessment and Evaluation policy can be found in the Student Agenda.

FINAL EVALUATION – 30%

The final evaluation will consist of an in-class, practical culminating task and/or a formal written exam.

LEARNING SKILLS

The following learning skills will be taught and assessed throughout the course and rated on the report card:

***Responsibility**

***Independent Work**

***Initiative**

***Organization**

***Collaboration**

***Self-regulation**

These skills will not be included in the final numeric mark. However, it is important to remember that the development of these skills is critical to academic achievement and does have a direct bearing on the final mark.