

**COURSE TITLE:** Grade 9 Academic Science  
**COURSE CODE:** SNC 1D  
**POLICY DOCUMENTS:** *The Ontario Curriculum, Grades 9 and 10 Science*

### **COURSE DESCRIPTION**

This course enables students to develop their understanding of basic concepts in biology, chemistry, earth and space science, and physics, and to relate science to technology, society, and the environment. Throughout the course, students will develop their skills in the processes of scientific investigation. Students will acquire an understanding of scientific theories and conduct investigations related to sustainable ecosystems; atomic and molecular structures and the properties of elements and compounds; the study of the universe and its properties and components; and the principles of electricity.

### **COURSE CONTENT:**

#### ***Earth and Space Science-*** The Study of the Universe

- ◆ Different types of celestial objects in the solar system and universe have distinct properties that can be investigated and quantified.
- ◆ People use observational evidence of the properties of the solar system and the universe to develop theories to explain their formation and evolution.
- ◆ Space exploration has generated valuable knowledge but at enormous cost.

#### ***Biology-*** Sustainable Ecosystems

- ◆ Ecosystems are dynamic and have the ability to respond to change, within limits, while maintaining their ecological balance.
- ◆ People have the responsibility to regulate their impact on the sustainability of ecosystems in order to preserve them for future generations.

#### ***Chemistry-*** Atoms, Elements, and Compounds

- ◆ Elements and compounds have specific physical and chemical properties that determine their practical uses.
- ◆ The use of elements and compounds has both positive and negative effects on society and the environment.

#### ***Physics-*** The Characteristics of Electricity

- ◆ Electricity is a form of energy produced from a variety of non-renewable and renewable sources.
- ◆ The production and consumption of electrical energy has social, economic, and environmental implications.
- ◆ Static and current electricity have distinct properties that determine how they are used.

## **EVALUATION**

*Assignment sheets, with instructions and evaluation rubrics, will be provided for all major evaluation tasks.*

### **Term 70%**

- Knowledge - homework, quizzes, tests, assignments, labs, presentations, etc.
- Thinking and Inquiry - tests, lab analysis, research assignments, etc.
- Communication - oral presentation, lab reports, assignments, tests, etc.
- Application - tests, lab activities, assignments, etc.

### **Summative 30%**

## **ATTENDANCE**

Regular attendance is an integral part of learning and evaluation in all areas. Students are responsible for all material, including tests, assignments, labs, etc. studied in their classes. Irregular attendance may limit a student's ability to earn a credit in a particular course. An acceptable absence is one due to a school sponsored activity or one substantiated by documentation (e.g. medical certificate). The teacher must be notified in advance of any already scheduled activity/appointment that conflicts with course responsibilities, in order that appropriate arrangements can be made. If advance notification is not possible (eg. sudden illness), please make a personal telephone call to your teacher at school (592-3361).

## **ASSIGNMENTS**

Evidence of achievement of the learning expectations is the basis for granting a credit. Major assignments are designed to cover particular key expectations. Missing assignments may impact on the student's final mark and may interfere with the successful completion of the course.