

# LISGAR COLLEGIATE INSTITUTE



**DEPARTMENT:** Science

**COURSE NAME:** Science, Grade 10, Applied

**COURSE CODE:** SNC 2P

---

## OVERVIEW

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 ecological sustainability, chemical reactions, weather systems, and motion.

## COURSE CONTENT

Biology: Ecosystems and Human Activity

Chemistry: Chemical Reactions and Their Practical Applications

Earth and Space Science: Weather Systems

Physics: Motion and Its Applications

## OVERALL CURRICULUM EXPECTATIONS

By the end of this course, students will:

- demonstrate an understanding of ecosystems, including the relationship between ecological balance and the sustainability of life;
- analyse natural and human threats to a local ecosystem and propose viable solutions to restore ecological balance;
- relate issues to environmental sustainability with a particular focus on issues in Ontario and Canada.
- demonstrate an understanding of chemical reactions and the symbolic systems used to describe them;
- investigate chemical reactions encountered in everyday life and their practical applications;
- demonstrate an understanding of how chemical reactions relate to technological products and processes commonly encountered in everyday life.
- demonstrate an understanding of the factors affecting the fundamental processes of weather systems;
- investigate and analyse trends in local and global weather conditions in order to forecast local weather patterns;
- describe new technologies in meteorology and explain the impact of weather on our daily lives.
- describe different kinds of motion and the quantitative relationships among displacement, velocity, and acceleration;
- design and conduct investigations to study the displacement, velocity, and acceleration of a vehicle;
- identify ways in which the principles of motion are used in developing new technologies and describe the consequences of such developments.

## LEARNING SKILLS

The development of sound learning skills is essential to the success of our students. Teachers and students will work together to understand and further the development of student learning skills in the areas of initiative, work habits, organization, team work, and independent work. Teachers report on learning skills on the midterm and final report cards.

## ASSESSMENT METHODS

Students' understanding of the course material will be assessed using unit tests, quizzes, in-class and take-home assignments, lab activities and reports, a summative project, and a final exam. Marks from the various assignments will be broken down and recorded in the following categories. Please refer to the Lisgar Assessment and Evaluation Policy.

## EVALUATION

### Course Work (70%)

1. Application	20 %
2. Knowledge/Understanding	20 %
3. Communication	10 %
4. Thinking/Inquiry/Problem Solving	20 %

### Summative (10%)

Summative Due Date(s): May, 2009

### Exam (20%)

The final exam will cover the entire course.

## ATTENDANCE

If you are absent from class, you are expected to catch up what you missed and complete any relevant homework. When you return to class, you must show your teacher an Absence Verification Form.

If you know in advance that you will be absent for a test, please see your teacher **before** the scheduled test date to arrange an alternate time to write it.

If you are unexpectedly absent for a valid reason on the day of a scheduled test, please let your teacher know why. When you return to class, remember to show an Absence Verification Form from your homeroom teacher and a note from your parents indicating that they are aware you missed the test. An **unjustified absence** for a test may result in a **mark of zero**.

## SUPPLEMENTARY NOTES

Text: Nelson Science 10 Concepts and Connections (Thomson Nelson)

Each Student will be assigned a textbook. If it is lost or damaged, the replacement cost is \$59.80.

Texts are to be covered with sturdy paper.

Prerequisite: Science, Grade 9, Academic or Applied

Homework:

The importance of regular completion of homework cannot be overemphasized.

\* Record homework assignments in your agenda at the end of each class.

\*Homework must be completed before the end of next day's class.

Extra help: See your teacher about arranging a mutually convenient time for extra help.

Please see page 25 in the Lisgar Student Planner under the heading "Extra help In A Subject".