

Cardinal Leger Secondary School Science Department



Course Name: Science, Grade 10

Course Code: SNC2D1 Ministry Guidelines: Science, 2008

Level: Academic

Textbook: Science Perspectives 10 Replacement Cost: \$100.00 Number:

Course Overview:

This course enables students to enhance their understanding of concepts in biology, chemistry, earth 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, forces that affect climate change, and the interaction of light and matter

Curriculum Strands and Overall Expectations:

Scientific Investigation Skills and Career Exploration

- Demonstrate scientific investigation skills in the four areas of skills (initiating and planning, performing and recording, analyzing and interpreting, and communicating)
- > Identify and describe a variety of careers related to the fields of science under study, and identify scientists, including Canadians, who have made contributions to those fields

Biology: Tissues, Organs, and Systems of Living Things

- > Evaluate the importance of medical and other technological developments related to systems biology, and analyze their societal and ethical implications
- Investigate cell division, cell specialization, organs, and systems in animals and plants, using research and inquiry skills, including various laboratory techniques
- > Demonstrate an understanding of the hierarchical organization of cells, from tissues, to organs, to systems in animals and plants

Chemistry: Chemical Reactions

- Analyze a variety of safety and environmental issues associated with chemical reactions, including the ways in which chemical reactions can be applied to address environmental challenges
- Investigate, through inquiry, the characteristics of chemical reactions
- Demonstrate an understanding of the general principles of chemical reactions, and various ways to represent them

Physics: Light and Geometric Optics

- > Evaluate the effectiveness of technological devices and procedures designed to make use of light, and assess their social benefits
- Investigate, through inquiry, the properties of light, and predict its behaviour, particularly with respect to reflection in plane and curved mirrors and refraction in converging lenses
- > Demonstrate an understanding of various characteristics and properties of light, particularly with respect to reflection in mirrors and reflection and refraction in lenses

Earth Science: Climate Change

- > Analyze some of the effects of climate change around the world, and assess the effectiveness of initiatives that attempt to address the issue of climate change
- Investigate various natural and human factors that influence Earth's climate and climate change
- > Demonstrate and understanding of natural and human factors, including greenhouse effect, that influence Earth's climate and contribute to climate change



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Evaluation:

Term Work	70%
Knowledge and Understanding	25%
Thinking	35%
Communication	15%
Application	25%
Final Assessment	30%
Formal Examination	20%
Culminating Task	10%
Course Total	100%

Learning Skills and Work Habits

E= Excellent G=Good S=Satisfactory N= Needs Improvement

Responsibility	Fulfills responsibility and commitments	
	Takes responsibility for and manages own behavior	
Organization	Devises and follows a plan and process for completing tasks	
	Establishes priorities and manages time	
Independent Work	 Independently monitors, assesses, revises plans to complete tasks and meet goals 	
	Uses class time to complete tasks	
Collaboration	Accepts various roles and an equitable share of work in a group	
	Builds healthy peer-to-peer relationships	
Initiative	 Looks for and acts on new ideas and opportunities 	
	Approaches new tasks with a positive attitude	
Self-Regulation	Sets own goals and monitors progress towards achieving them	
	Seeks clarification or assistance when needed	

Missed/Late/Incomplete Assignments

It is the student's responsibility to address missed, late, or incomplete assignments. Students are expected to complete assignments and to adhere to assignment deadlines as follows:

Due Date	10% Penalty Zone	Closure Date
A due date is set by the teacher.	1 school day late – 3% 2 school days late – 6% 3 school days late – 10% Maximum penalty of 10%	Once the closure date has passed, work is considered incomplete and a mark of zero applies.

Missed Quiz/Test/Lab Procedures

If a student is absent on the day of a test, the student will receive a mark of zero unless a doctor's note is provided and they will write the test at a later date as determined by the teacher.

If a student is absent on the day of a lab, a mark of zero for the performance of the lab may result due to the specific timing, preparation and availability of materials. Students are responsible for obtaining data from the lab and completing the written portion on their own time.