

Cardinal Leger Secondary School Science Department



Course Name: Grade 11 Biology

Course Code: SBI 3C Ministry Guidelines: Science, 2008

Level: College

Teacher: Room:

Textbook: N/A Replacement Cost: N/A Number: N/A

Course Overview:

This course focuses on the processes that occur in biology systems. Students will learn concepts and theories as they conduct investigations in the areas of cellular biology, microbiology, genetics, the anatomy of mammals, and the structure of plants and their role in the natural environment. Emphasis will be placed on the practical application of concepts, and on the skills needed for further study in various branches of the life science and related fields.

Curriculum Strands and Overall Expectations:

Cellular Biology:

- ➤ Demonstrate an understanding of basic processes of cellular biology, including membrane transport, cellular respiration, photosynthesis, and enzyme activity;
- > Investigate factors that influence cellular activity using appropriate laboratory equipment and techniques;
- ➤ Demonstrate an understanding of the importance of cellular processes in their personal lives, as well as in the development and application of biotechnology.

Microbiology:

- ➤ Demonstrate an understanding of the characteristics of various micro-organisms, of their role in the environment, and of their influences on other organisms, including humans;
- Analyse the development and physical characteristics of micro-organisms, using appropriate laboratory equipment and techniques;
- Explain the role of micro-organisms with respect to human health and in technological applications in medicine, industry, and the environment.

Anatomy of Mammals:

- ➤ Demonstrate an understanding of the structure, function, and interactions of the main internal systems of humans and other animals;
- Investigate, with the aid of laboratory procedures, the physiological mechanisms of animal systems that are responsible for the physical health of the individual;
- ➤ Demonstrate an understanding of the connections among health, preventive measures, and treatment, and of their social and economic implications.

Plant Structure and Physiology

- > Demonstrate an understanding of the diversity of plants, and of their internal transport systems, reproduction, and growth;
- Analyse the factors influencing the growth and maintenance of plants, using appropriate laboratory equipment and techniques;
- Evaluate the roles of plants in the urban community, in various technologies and industries, and in natural ecosystems.



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Evaluation:

Term Work	70%
Knowledge and Understanding	25%
Thinking	35%
Communication	15%
Application	25%
Final Assessment	30%
Formal Examination	15%
Culminating Task	15%
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 quiz, a 'no mark' will be assigned. Quizzes will not be re-written on any other day. The 'no mark' will not affect a student's grade. Students will only be granted a maximum of two 'no mark' evaluations. A third missed quiz will result in a mark of zero. 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.

Parent Signature:	Student Signature:	