



FOREST HILL CI

SBI3C GRADE 11 BIOLOGY COLLEGE PREPARATION COURSE OUTLINE PREREQUISITE: GRADE 10 SCIENCE (SNC2P)

Resources

Textbook: The grade 11 Biology textbook is "Biology 11" by McGraw Hill Ryerson. The replacement cost of the textbook is **\$80**.

Tools for Success/Learning Skills

Responsibility	<ul style="list-style-type: none"> Understand and follow this course outline and the policies outlined in the Student Agenda. Arrive on time Come prepared to work with all necessary tools
Organization	<ul style="list-style-type: none"> Keep an organized notebook Keep an organized calendar of important dates
Independent Work	<ul style="list-style-type: none"> Stay on task Avoid disrupting the learning of others. Do homework regularly and complete all assigned work Review/study the work often
Collaboration	<ul style="list-style-type: none"> Be a responsible group member. Help your peers succeed by sharing ideas, tutoring and studying together Prepare for labs as a team with a focus on each other's safety
Initiative	<ul style="list-style-type: none"> Be active participants in the classroom Ask questions when unsure of the material & seek extra help when needed. Ensure that you get any missed handouts and catch up on missed work
Self-Regulation	<ul style="list-style-type: none"> Set goals and make good choices regarding academic success. Respect yourself, classmates and teachers.

Academic Honesty: Cheating and Plagiarism

Students are expected to submit only their own original work on evaluations done in class or out of class. Plagiarism is the passing off the ideas or writings of another as one's own. Cases of academic dishonesty (cheating and/or plagiarism) will be dealt with on a case-by-case basis, but each case will involve investigation, communication with the student and his/her parent/guardian, and a mark of zero for plagiarized work. Whether the student has an opportunity to demonstrate his/her learning in another assignment will be at the discretion of the teacher and/or Principal.

Assessment and Evaluation

The primary purpose of assessment and evaluation is to improve student learning. Assessment can take on one of three forms (described below). In accordance with *Growing Success*, a student's most recent and consistent work will be taken into account.

Diagnostic	Assessment FOR learning determines how learning should proceed at the beginning of a unit.
Formative	Assessment AS learning provides feedback for a student to determine where improvement is needed. An example of this is homework.
Summative	Assessment OF learning evaluates what a student has learned at the conclusion of a unit/course. Examples include tests, quizzes, assignments and labs.

Evaluation of student achievement will be defined by four broad **Achievement Categories** (described below). The category weighting for semester work is shown.

Semester Work		70%
Knowledge & Understanding	Specific content acquired in the course and the comprehension of its meaning and significance.	25%
Thinking & Investigation	The use of critical and creative thinking skills and inquiry, research, and problem-solving skills.	25%
Communication	The conveying of meaning through various forms.	25%
Application	The use of knowledge and skills to make connections within and between various contexts.	25%
Exam		30%

Academic Integrity: Missed Classes, Evaluations and Assignments

It is the **responsibility of the student** to notify **all** appropriate parties (teachers, office, coach, etc) **in advance** where appropriate and in compliance with school policies and procedures as per student agenda if the student will be absent. This allows for both the student and teacher to make alternative arrangements regarding missed assignments or evaluations. In the event that advance notice is not possible, students should seek out the teacher in the morning (before school) with the appropriate documentation (e.g. Doctor's note, photocopied note from the office) in order to ensure that they have the opportunity to make-up the missed evaluation/assignment and course work.

Overall Course Expectations

A. SCIENTIFIC INVESTIGATION SKILLS AND CAREER EXPLORATION

Throughout this course, students will:

- demonstrate scientific investigation skills (related to both inquiry and research) 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.

B. Cellular Biology

- evaluate the impact of environmental factors and medical technologies on certain cellular processes that occur in the human body
- investigate the structures and functions of cells, and the factors that influence cellular activity, using appropriate laboratory equipment and techniques
- demonstrate an understanding of the basic processes of cellular biology

C. Microbiology

- assess the effects of microorganisms in the environment, and analyze ethical issues related to their use in biotechnology
- investigate the development and physical characteristics of microorganisms, using appropriate laboratory equipment and techniques
- demonstrate an understanding of the diversity of microorganisms and the relationships that exist between them

D. Genetics

- evaluate some social, ethical, and environmental implications of genetic research and related technologies
- investigate the process of meiosis, and analyze data related to the laws of heredity
- demonstrate an understanding of the process of meiosis, and explain the role of genes in the transmission of hereditary characteristics

E. Anatomy of Mammals

- analyze the social or economic impact of a technology used to treat systems in the human body, and the impact of lifestyle choices on human health
- investigate, through laboratory inquiry or computer simulation, the anatomy, physiology and response mechanisms of mammals
- demonstrate an understanding of the structure, function, and interactions of the circulatory, digestive, and respiratory systems of mammals

F. Plants in the Natural Environment

- analyze the roles of plants in ecosystems, and assess the impact of human activities on the balance of plants within those ecosystems
- Investigate some of the factors that affect plant growth
- Demonstrate an understanding of the structure and physiology of plants and their role in the natural environment