



Grand River Collegiate Institute COURSE OUTLINE

For students and their families.

Course Name

Grade 11 College Biology

Curriculum document <http://www.edu.gov.on.ca/eng/curriculum/secondary/>

Course Code

SBI 3CI

Prerequisite

**Grade 10
academic or
applied
Science**

Teacher

Mrs. Batters

Contact

519-576-5100 (ext. 6005)

Textbook

Nelson College 11 (Replacement Cost \$99.95)

COURSE DESCRIPTION

This course focuses on the processes that occur in biological 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 sciences and related fields.

Essential Learnings/Expectations/Skills – To be successful in this course you **must** be able to demonstrate **all** of these essential expectations.

Scientific Investigation Skills and Career Exploration (throughout the course):

- formulate relevant scientific questions about observed relationships, ideas, problems, or issues, make informed predictions, and/or educated hypothesis to focus inquiries or research
- select appropriate instruments and materials, and identify appropriate methods, techniques, and procedures, for each inquiry
- identify and locate a variety of print and electronic sources that enable them to address research topics fully and appropriately
- identify and describe a variety of careers related to the field of Biology under study
- describe the contributions of scientists, including Canadians

Cellular Biology (Strand 1):

- to investigate the structures and functions of cells
- to recognize the factors that influence cellular activity by using appropriate laboratory equipment and techniques
- to demonstrate an understanding of the basic processes of cellular biology

Microbiology (Strand 2):

- access 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 relationship that exists between them

Genetics (Strand 3):

- 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 in the process of meiosis, and explain the role of genes in the transmission of hereditary characteristics

Anatomy of Mammals (Strand 4):

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

Plants in the Natural Environment (Strand 5):

- analyze the role of plants in ecosystems and access the impact of human activities
- investigate some of the factors that affect plant growth
- demonstrate an understanding of the structure and physiology of plants

EVALUATION- Evidence of Learning

Assessment Technique	Purpose
Quizzes	Most formative
Laboratory reports	Formative and Two major summative
Tests	Summative
Assignments	Summative

FINAL GRADE	
TERM WORK	
Tests	30%
Lab reports and Assignments	40%
FINAL EVALUATION	
Lab assessment	10%
Final Exam -1.5 hours	20%

Refer to the GRCI Web Site www.grc.wrdsb.ca for Assessment, Evaluation and Reporting Policies as well as Academic Honesty and Late Policies.

Procedures

Late and Missing Assignments: It is important for students to develop good personal management skills (such as time management and planning). These skills will be reflected in the **learning skills** area of the report card. It is expected that students will complete and submit all essential tasks as they are the opportunity for you to demonstrate your learning to your teacher.

Attendance: Attendance in classes is an important part of learning, and absences should be avoided. When a student is absent, a parent/guardian must call the school's attendance line on the date of absence, or provide a note explaining the absence for the student to submit the following day. Students are responsible for what they missed during their absence.

Cheating and Plagiarism: It is important for students to do their own best work. Most assignments for this class are done within the classroom, observed by the teacher, and this helps to minimize the chances of cheating and plagiarism. In the event that cheating or plagiarism occurs, the following consequences may be implemented, in consultation with administration, depending on the situation:

1. The student may be required to redo all or part of the assignment or assessment.
2. The student may be required to complete an alternate assignment or assessment.
3. The student's work may be treated as a missed assignment.

There may also be other consequences that are determined to be appropriate (e.g. detention, suspension, etc.) as per the school's progressive discipline process. Parents/guardians will be informed about the infraction and the consequences.

Please refer to the school website: <http://grc.wrdsb.ca/about/policies> for more details on these policies and other academic procedures.

COMPLETION OF ASSESSMENTS

Each student is responsible for submitting all assessments on a specific due date. If they fail to submit any assessment, please provide a daytime and evening phone number, as well as an e-mail address to allow for communication.

Daytime phone contact: _____

Evening phone contact: _____

E-mail address: _____

Signatures

Please sign below indicating you have read and understand the requirements for successful completion of this course.

Student

Parent/Guardian