Grand River Collegiate Institute
COURSE OUTLINE

For students and their families.

Course Name	Course Code	Prerequisite
Biology, Grade 11 University Preparation	**SBI 3UI**	SNC 2DI

Curriculum Document http://www.edu.gov.on.ca/eng/curriculum/secondary/

Teacher	Contact
Mrs. K. Neaven	519-576-5100 (ext.6058)

Textbook
Nelson Biology 11 (Replacement Cost $ 99.95)

Course Description:
This course furthers students' understanding of the processes that occur in biological systems. Students will study theory and conduct investigations in the areas of biodiversity; evolution; genetic processes; the structure and function of animals; and the anatomy, growth, and function of plants. The course focuses on the theoretical aspects of the topics under study, and helps students refine skills related to scientific investigation.

Essential Learnings/Expectations/Skills - To be successful in this course you **must** be able to demonstrate **all** of these essential expectations. These will be clearly communicated to you throughout the course.

Scientific Investigation Skills and Career Exploration (throughout the course):
- Demonstrate scientific investigative skills (related to both inquiry and research) in the four areas of skills (initiating and planning, performing and recording, analysing and interpreting, and communicating).
- Identify and describe careers related to the fields of science under study, and describe the contributions of scientists to those fields.

Genetic Processes
- Evaluate the importance of some recent contributions to our knowledge of genetic processes, and analyse social and ethical implications of genetic and genomic research;
- Investigate genetic processes, including those that occur during meiosis, and analyse data to solve basic genetics problems involving monohybrid and dihybrid crosses;
- Demonstrate an understanding of concepts, processes, and technologies related to the transmission of hereditary characteristics.

Evolution
- Analyse the economic and environmental advantages and disadvantages of an artificial selection technology, and evaluate the impact of environmental changes on natural selection and endangered species;
- Investigate evolutionary processes, and analyse scientific evidence that supports the theory of evolution;
- Demonstrate an understanding of the theory of evolution, the evidence that supports it, and some of the mechanisms by which it occurs.

Diversity of Living Things

- Investigate, through laboratory and/or field activities or through simulations, the principles of scientific classification, using appropriate sampling and classification techniques;
- Demonstrate an understanding of the diversity of living organisms in terms of the principles of taxonomy and phylogeny.
- Investigate the structures and functions of plant tissues, and factors affecting plant growth;
- Demonstrate an understanding of the diversity of vascular plants, including their structures, internal transport systems, and their role in maintaining biodiversity

Animals: Structure and Function

- Analyse the relationships between changing societal needs, technological advances, and our understanding of internal systems of humans;
- Investigate, through laboratory inquiry or computer simulation, the functional responses of the respiratory and circulatory systems of animals, and the relationships between their respiratory, circulatory, and digestive systems;
- Demonstrate an understanding of animal anatomy and physiology, and describe disorders of the respiratory, circulatory, and digestive systems.

EVALUATION – Evidence of Learning

Formative Assessment:
There will be many ongoing formative assessments throughout the course. Formative assessments serve as practice for students prior to being evaluated (summative assessment). The ongoing feedback helps students to recognize their strengths and weaknesses and provides information to the teacher regarding next steps for the student's learning. In the case where, due to extenuating circumstances, a student has been unable to complete a summative assessment, formative assessments may be used as additional evidence to support the teacher's professional judgment when determining a final grade.

Summative Assessment:
Summative assessment will occur near the end of the unit/instruction and demonstrates the student's knowledge for the purpose of evaluation and reporting. These assessments will be included in the mark shown on the student's report card.

The types of formative and summative assessments are outlined below:

Assessment Technique	**Purpose**
Quizzes	Formative and Summative
Laboratory Reports	Formative and Summative
Tests (one per strand)	Summative
Assignments	Formative and Summative

Final Grade	
Term Work	
● Tests and Quizzes	45 %
● Lab Reports and Assignments	25 %
Final Written Exam – 2 Hour Exam	30 %

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. 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.

Signatures

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

_____
Student Name

_____
Student Signature

_____
Date

_____
Parent/Guardian Name

_____
Parent/Guardian Signature

_____
Date

_____
Daytime phone number

_____
Evening phone number

_____
Email address