


<p><b>Guelph Collegiate Vocational Institute Upper Grand District School Board</b></p> <p>Course Outline</p> 	<p><b>Department: Science</b></p> <p><b>Course Title: Biology</b></p> <p><b>Course Type: University Preparation</b></p> <p><b>Grade: 11</b></p> <p><b>Course Code: SBI 3U</b></p> <p><b>Credit Value: 1</b></p>

<p><b>Department Head: Carrie Warren</b></p> <p><b>Teachers: Ron Wight, Susan Lodge, Chris VanBeurden</b></p> <p><b>Teacher email: (not mandatory)</b></p> <p><b>Date of Development: September 2015</b></p>
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<p><b>Curriculum Document:</b> (copy subject-specific document from secondary curriculum website <a href="http://www.edu.gov.on.ca/eng/curriculum/secondary/2009science11_12">http://www.edu.gov.on.ca/eng/curriculum/secondary/2009science11_12</a>)</p>	<p><b>Course Prerequisites/Corequisites:</b></p> <p><b>SNC 2D (required prerequisite)</b></p>
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**Course Description:**

The course furthers students' understanding of processes occurring in biological systems. Students will study theory and conduct investigations in the areas of genetic processes, biodiversity, evolution, structure and function of plants, and of animals.

**Term Work (70% of the final mark)****Unit Title, Big Ideas, and Unit Culminating Tasks**

Genetic Processes: Introduction to the processes of heredity, including meiosis; and analysis of Mendelian crosses. Evaluation of the impact of recent genetic research.

Culminating Tasks: Mendelian Problems Quiz, Unit Test

Diversity of Living Things: Introduction to principles of scientific classification and effect of various human activities on biodiversity. Individual student research on specific species develops understanding of classification and appreciation for the vast diversity of life.

Culminating Tasks: Species Project, Unit Test

Evolution: Introduction to evolutionary theory, the evidence supporting it, and some of its mechanisms and processes. Analysis of impact of artificial selection, and environmental changes for natural selection and endangered species.

Culminating Tasks: Royal Ontario Museum Assignment, Unit Test

Plants: Anatomy, Growth & Function: Investigation of the structure and function of plant tissues, and factors affecting plant growth. Exploration into diversity of vascular plants, and their role in maintaining biodiversity. Evaluation of the importance of the sustainable use of plants to society.

Culminating Tasks: Plant Experiment Lab Report, Unit Test

Animals: Structure & Function: Investigation into the relationships and functional responses of respiratory, circulatory, and digestive systems; including common disorders of those systems; culminates with a mammalian dissection. Analysis of the changing relationships between technology, society, and understanding of internal systems of humans.

Culminating Tasks: Heart Rate Lab Report, Unit Test

**Culminating Tasks/Exams (30% or the final mark)****Course Culminating Task/Exams and Description**

Final Exam

Based on the range of students' learning needs, a selection from the strategies listed below may be utilized. Refer to [list of teaching and assessment strategies](#).

**Teaching Strategies:** structured overview, explicit teaching, mastery lecture, demonstrations, case studies, inquiry, reading for meaning, concept attainment, field trip, conducting experiments, model building, reports, homework, assigned questions, discussion, laboratory groups, problem solving

**Assessment and evaluation strategies:** formative quizzes, formative and summative lab reports, formative and summative assignments, summative unit tests, final exam

**Textbooks/Learning Resource Materials (align with Policy 603)**

McGraw-Hill Ryerson Biology 11 (2010)

**Fees for Learning Materials/Activities**

<b>Learning Materials/Activities</b>	<b>Cost</b>
Biology 11 Study Guide (optional)	\$15.00

Please refer to the [GCVI Student Handbook](#) for our school policies on:

- academic integrity
- late and missed assignments