

# GEORGE S. HENRY ACADEMY COURSE OUTLINE



## **Biology: University Preparation**

COURSE CODE	SBI 3U	GRADE	11
TEACHER(S)	Mr. P. Santos	CREDIT VALUE	1.0
DEPARTMENT	Science	PREREQUISITE	SNC 2D

# 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.

Additional information can be found at: http://www.edu.gov.on.ca/eng/curriculum/secondary/subjects.html

#### **COMMUNICATION**

Please direct all questions or concerns regarding student progress or program of study to the course teacher. Please call the main office to leave a message at 416-395-3240.

CONCRETE LEARNING RESOURCES	DIGITAL LEARNING RESOURCES
Biology 11	My School Day App - An app that allows you to stay up- to-date with in-class tasks and receive reminders about upcoming evaluations.
	Google Classroom - 9uoo1o

#### GEORGE S. HENRY ACADEMY'S COURSE WORK POLICY

For each evaluation, the teacher will inform students of the <u>due date</u> and the <u>ultimate deadline</u>. The ultimate deadline is the last opportunity for students to submit an assignment for evaluation. Teachers may also use a variety of other methods for dealing with late and missed assignments at their discretion.

#### Strategies to assist students in meeting deadlines include:

- Peer tutoring
- Using the school app
- Using a personal agenda
- Seeking extra help from teachers
- Requesting for assistance with time management and organizational skills
- Getting help from parents/guardians
- Getting help from a caring adult in the school

#### ASSESSMENT AND EVALUATION OF STUDENT ACHIEVEMENT

Each course follows an achievement chart which enables teachers to make judgements about student work that are based on clear performance standards and on a body of evidence collected over time. Additional information can be found on the Ministry of Education website noted within the course description.

#### **ACHIEVEMENT CHART CATEGORIES**

**Knowledge and Understanding (K & U)**: Subject-specific content acquired in each course (knowledge), and the comprehension of its meaning and significance (understanding)

Thinking (T): The use of critical and creative thinking skills and/or processes

**Communication (C):** The conveying of meaning through various forms

Application (A): The use of knowledge and skills to make connections within and between various contexts

COURSE	WORK	K (70% of your overall grade)
Categories	%	Possible Assessments of Learning
K & U	21	<ul> <li>Knowledge of content (e.g., facts, terminology, definitions, safe use of equipment and materials)</li> <li>Understanding of content (e.g., concepts, ideas, theories, principles, procedures,</li> </ul>
		processes)
Т	14	<ul> <li>Use of initiating and planning skills and strategies (e.g., formulating questions, identifying the problem, developing hypotheses, selecting strategies and resources, developing plans)</li> </ul>
		<ul> <li>Use of processing skills and strategies (e.g., performing and recording, gathering evidence and data, observing, manipulating materials and using equipment safely, solving equations, proving)</li> </ul>
		<ul> <li>Use of critical/creative thinking processes, skills, and strategies (e.g., analysing, interpreting, problem solving, evaluating, forming and justifying conclusions on the basis of evidence)</li> </ul>
С	14	Expression and organization of ideas and information (e.g., clear expression, logical organization) in oral, visual, and/or written forms (e.g., diagrams, models)
		Communication for different audiences (e.g., peers, adults) and purposes (e.g., to inform, to persuade) in oral, visual, and/or written forms
		<ul> <li>Use of conventions, vocabulary, and terminology of the discipline in oral, visual, and written forms (e.g., symbols, formulae, scientific notation, SI units)</li> </ul>
A	21	<ul> <li>Application of knowledge and skills (e.g., concepts and processes, safe use of equipment, scientific investigation skills) in familiar contexts</li> <li>Transfer of knowledge and skills (e.g., concepts and processes, safe use of</li> </ul>
		<ul> <li>equipment, scientific investigation skills) to unfamiliar contexts</li> <li>Making connections between science, technology, society, and the environment</li> </ul>
		(e.g., assessing the impact of science on technology, people and other living things, and the environment)
		Proposing courses of practical action to deal with problems relating to science, technology, society, and the environment

FINAL EVALUATION (30% of your overall grade)					
Type	Description				
Culminating Task(s)	Research essay or report (to be determined)	15			
Exam	Written final exam held during formal exam week	15			

#### UNITS OF STUDY/COURSE ROAD MAP (subject to change)

- Diversity of Living Things
  - All living things can be classified according to their anatomical and physiological characteristics.
  - o Human activities affect the diversity of living things in ecosystems.
- Evolution
  - Evolution is the process of biological change over time based on the relationships between species and their environments.
  - o The theory of evolution is a scientific explanation based on a large accumulation of evidence.
  - Technology that enables humans to manipulate the development of species has economic and environmental implications.
- Genetic Processes
  - o Genetic and genomic research can have social and environmental implications.
  - Variability and diversity of living organisms result from the distribution of genetic materials during the process of meiosis.
- Animals: Structure and Function
  - Groups of organs with specific structures and functions work together as systems, which interact with other systems in the body.
  - The development and uses of technology to maintain human health are based, in part, on the changing needs of society.
- Plants: Anatomy, Growth, and Function
  - Plants have specialized structures with distinct functions that enable them to respond and adapt to their environment.
  - o Plant variety is critical to the survival and sustainability of ecosystems.

### GEORGE S. HENRY ACADEMY'S LATE & MISSED EVALUATION POLICY

It is the responsibility of the student to make arrangements with their teacher for any missed course material and/or assignments. Extenuating circumstances will be considered on a case-by-case basis.

#### GEORGE S. HENRY ACADEMY'S ACADEMIC DISHONESTY POLICY

Cheating and plagiarism will not be condoned. For more information, refer to the Academic Honesty Policy found in the Student Handbook. The Student Handbook can be found in the George S. Henry Academy app.

SPECIALIST HIGH SKILLS MAJOR (SHSM) REQUIREMENTS						
GRADE 11 AND 12 CREDITS	ENVIRONMENT	HEALTH & WELLNESS	HOSPITALITY &TOURISM			
Major Credits	4	4	4			
English (including a CLA*)	2	1	1			
Mathematics (including a CLA)	1	1	1			
Science or Social Sciences and Humanities (including a CLA) (May be substituted with 1 coop credit)	-	1	-			
Business Studies or Science ( <u>including a</u> <u>CLA</u> ) (May be substituted with 1 coop credit)			1			
Cooperative Education	2	2	2			
TOTAL	9	9	9			

<sup>\*</sup>Contextualized Learning Activity