





COURSE CODE	SBI3U	GRADE	11
TEACHER(S)	Cr	CREDIT VALUE	1.0
DEPARTMENT	Science	PREREQUISITE	SNC2D

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	
	My School Day App - An app that allows you to	
Biology 11	stay up-to-date with in-class tasks and receive	
	reminders about upcoming evaluations.	
	BrightSpace	
	Apps such as Khan Academy, EdPuzzle,	

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 (70% of your overall grade)					
Categorie	%	Possible Assessments of Learning			
S					
K & U		Knowledge of content (e.g., facts, terminology, definitions, safe use of			
	30	equipment and materials)			
		• Understanding of content (e.g., concepts, ideas, theories, principles, procedures,			
		processes)			
T		Use of initiating and planning skills and strategies (e.g., formulating questions,			
	20	identifying the problem, developing hypotheses, selecting strategies and			
		resources, developing plans)			
		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)			
		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)			
С	•0	• Expression and organization of ideas and information (e.g., clear expression,			
	20	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			
		 Use of conventions, vocabulary, and terminology of the discipline in oral, 			
		visual, and written forms (e.g., symbols, formulae, scientific notation, SI units)			
A		Application of knowledge and skills (e.g., concepts and processes, safe use of			
	30	equipment, scientific investigation skills) in familiar contexts			
		Transfer of knowledge and skills (e.g., concepts and processes, safe use of			
		equipment, scientific investigation skills) to unfamiliar contexts			
		Making connections between science, technology, society, and the environment			
		(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)	TBA such as Practical Lab Exam, Presentation or Project	10		
Exam	Written final exam held during formal exam week	20		

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

- Animals: Structure and Function
 - o 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.
- 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.
- Diversity of Living Things
 - o All living things can be classified according to their anatomical and physiological characteristics.
 - 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.
- Plants: Anatomy, Growth, and Function
 - o 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.

Lab Activities

In this course you will complete several labs or appropriate computer simulations, such as:

- ✓ Microscopy and/or microslide
- **✓** Dissection
- ✓ Comparative exploration of organisms from different Kingdoms
- ✔ Plant growth factors
- ✓ Factors affecting respiratory rate, heart rate etc.
- ✓ Inquiries on evolutionary processes

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 My School Day app.

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

^{*}Contextualized Learning Activity