

GRADE 11 BIOLOGY TERM PLAN

2024- 2025

TERM ONE: September 2- December 19, 2024

DATES	WEEK	THEORY	LABS/QUIZ/TESTS
SEPTEMBER			
September 2-6	WEEK 1 3 Sessions	<ul style="list-style-type: none"> ● Review of End of Year Exam ● Discuss expectations for CSEC labs and point out common errors made in Grade 10 	
September 9-13	WEEK 2 3 Sessions	<p>RESPIRATION</p> <ul style="list-style-type: none"> ● Aerobic and Anaerobic respiration ● Define each term ● Equations for each term ● Explain what occurs in each type of respiration. ● Effect of exercise on aerobic and anaerobic respiration 	<p>**Completion of Outstanding Labs</p> <p>*Lab #1-Enzymes</p> <p>OR</p> <p>LAB #2- The effect of exercise on respiration</p>
September 16-20	WEEK 3 3 Sessions	<p>RESPIRATORY SYSTEM</p> <ul style="list-style-type: none"> ● Mechanism of breathing ● Gaseous exchange ● Effects of cigarette smoking on the respiratory system ● Diseases of the respiratory system 	<p>Coursework 1- Worksheet on Respiration and the Respiratory system</p>

September 23-27	WEEK 4 3 Sessions	IRRITABILITY AND MOVEMENT <ul style="list-style-type: none"> ● Definition of 'stimulus' and 'response'; ● Response of green plants to stimuli ● Growth movement in plants ● Response of invertebrates to variations in light intensity, temperature and moisture ● Growth movement of animals ● Explain why the response to stimuli is important for the survival of organisms 	Assign Group presentation on Brain, Skin and Eye objectives. LAB #2- The effect of exercise on respiration
OCTOBER			
September 30- October 4	WEEK 5 3 Sessions	IRRITABILITY <ul style="list-style-type: none"> ● Receptor and Effector ● Relationship among the receptor, the central nervous system and the effector ● explain a simple reflex action ● describe the functions of the main regions of the brain ● physiological, social and economic effects of drug abuse 	LAB #3- Respiration- Drawing of gills LAB WRITE UP- <ul style="list-style-type: none"> ● Complete lab write ups for Respiration
October 7-11	WEEK 6 3 Sessions	IRRITABILITY <ul style="list-style-type: none"> ● Structure and function of the human eye ● explain accommodation, sight defects and the corrections of each ● Relate the structure of the human skin to its function in temperature regulation and protection 	LAB - IMPLEMENTATION for IP Coursework 2- Group Presentation on Brain, Skin and Eye.

Oct 14-16	WEEK 7 1-3 Sessions	MOVEMENT <ul style="list-style-type: none"> ● relate the structure of the skeleton to its function in humans ● discuss the importance of locomotion in animals ● describe the mechanism of movement in a human forelimb 	*Assign Lab #5-Growth of Pea
October 17 - 21 MID TERM BREAK			
1st Standardized Test Oct 22 - 28 Week 8			
October 29 -November 1	WEEK 9 3 Sessions	GROWTH AND MITOSIS <ul style="list-style-type: none"> ● Review the stages of Mitosis using 2-D diagrams; Group activity ● Define growth ● Measurement of growth ● Growth of insects and crustaceans 	
NOVEMBER			
November 4-8	WEEK 10 3 Sessions	GROWTH <ul style="list-style-type: none"> ● Factors affecting population growth ● S-curves ● Germination ● Role of mitosis in asexual reproduction 	Hand out the procedure for LAB#5-Variation lab.
November 11-15	WEEK 11 3 Sessions	GENETICS <ul style="list-style-type: none"> ● Definitions of terms genes, chromosomes, DNA, etc. ● Monohybrid cross for codominance incomplete dominance and complete dominance. ● Practicing the monohybrid cross 	Write up LAB #4-Growth of Pea

		<ul style="list-style-type: none"> ● Introduction of continuous and discontinuous variation 	
November 18-22	WEEK 12 3 Sessions	<p><i>VARIATION & NATURAL SELECTION</i></p> <ul style="list-style-type: none"> ● Variation (continuous and discontinuous) Mutation ● Sex linked disease, sex determination, sickle cell, color blindness, testcross, pedigree chart ● Continue variation (Example: foot size, presence or absence of horns in cattle, pod size, tongues rolling, and leaf size. Mention genetic and environmental effects). ● Complete teaching on Variation 	Course Work 3- Quizizz on Genetics
Nov 25-29	WEEK 13 3 Sessions	<p>NATURAL SELECTION & EVOLUTION</p> <ul style="list-style-type: none"> ● Define Biological species ● Speciation (definition of speciation, types of speciation (causes by physical/geographical separation; caused by ecological/behavioral differences) ● Importance of natural selection in preserving useful adaptations, e.g., evolution of cassava plants, sea turtles, Caribbean lizards) ● Distinguish between natural and artificial selection 	.Assign Coursework -Group research and presentation of the Advantages and Disadvantages of Genetic Engineering

		<ul style="list-style-type: none"> • Explain how natural selection plays a role in biological evolution <p>Examples: peppered moth, the Galapagos finches, bacterial resistance, radiation of the Caribbean lizards.</p>	
DECEMBER			
December 2-6	WEEK 14 3 Sessions	GENETIC ENGINEERING <ul style="list-style-type: none"> • What is genetic engineering? • How can it be used to change the traits of an organism? • Advantages and Disadvantages of genetic engineering: • (Social, ethical and ecological implications; Fingerprinting, DNA tests, gene therapy, captive breeding programs). 	
2nd Standardized Test Dec 9-13 Week 15			
December 16-19	WEEK 16 1-3 Sessions	Revision for Mock Exam	
END OF TERM December 19, 2023			