

GRADE 11 BIOLOGY TERM PLAN

2023– 2024

TERM ONE: September 8– December 19, 2023

| DATES | WEEK | THEORY | LABS/QUIZ/TESTS |
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| SEPTEMBER | | | |
| September 8 | 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 11-15 | WEEK 2 3 Sessions | RESPIRATION <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 | **Completion of Outstanding Labs *LAB * Matthias's PD For those who have not yet assigned this lab *Lab #1-Enzymes |
| September 18-22 | WEEK 3 3 Sessions | RESPIRATORY SYSTEM <ul style="list-style-type: none"> Mechanism of breathing Gaseous exchange Effects of cigarette smoking on the respiratory system Diseases of the respiratory system | |
| September 25-29 | 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 | LAB #2- The effect of exercise on respiration |

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| | | intensity, temperature and moisture <ul style="list-style-type: none"> • Growth movement of animals • Explain why the response to stimuli is important for the survival of organisms | |
| OCTOBER | | | |
| October 2-6 | 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 9-11 | 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 |
| October 12-16 MID TERM BREAK | | | |
| Oct 17-20 | WEEK 7 3 Sessions | MOVEMENT <ul style="list-style-type: none"> • relate the structure of the skeleton to its function in humans • discuss the importance of | *Assign Lab #5-Growth of Pea |

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| | | locomotion in animals <ul style="list-style-type: none"> describe the mechanism of movement in a human forelimb | |
| 1st Standardized Test Oct 23 - 27 Week 8 | | | |
| October30-November3 | 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 | Homework -Drawing external and internal structure of a kidney bean on a blank page and paste in notebook. |
| NOVEMBER | | | |
| November 6-10 | WEEK 10 3 Sessions | GROWTH <ul style="list-style-type: none"> Factors affecting population growth S-curves Germination Role of mitosis in asexual reproduction | Handout the procedure for LAB#5-Variation lab. |
| November 13-17 | 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 Introduction of continuous and discontinuous | Write up LAB #4- Growth of Pea |

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| | | variation | |
| November 20-24 | 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 | Worksheet |
| Nov 27-Dec 1 | 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 • Explain how natural selection plays a role in | |

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| | | biological evolution Examples: peppered moth, the Galapagos finches, bacterial resistance, radiation of the Caribbean lizards. | |
| DECEMBER | | | |
| 2nd Standardized Test Dec 4-8 Week 14 | | | |
| December 11-15 | WEEK 15 3 Sessions | Revision for Mock Exam 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). | .Assign Coursework - Group research and presentation of the Advantages and Disadvantages of Genetic Engineering |
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| END OF TERM December 19, 2023 | | | |