

St.Mary's College
Form 5 Course Outline
Biology 2022-2023

Term	Topic	Subtopic	Week
1	Sexual Reproduction	Reproductive systems in animals	1-2
		Menstral cycle in man	
		Gamete, foetus and embryo formation in man	
		Methods of birth control in man	
	Germination and growth		
		Processes taking place during germination	3
		LAB: PD: Factors affecting germination	
	Inheritance		
		DNA, chromosomes and genes	4-6
		Dominant and recessive conditions	
		Sex determination and sex linked diseases	
		LAB: AI: Modelling Inheritance	
	Variation		
		Importance of variation	7-8
		Continuous and discontinuous variation	
		LAB: ORR: Variation in human height	
	Natural Selection		
		Natural and artificial selection	9
		Mutation	
	Excretion		
		Importance of excretion and egestion	10-11
		Metabolic wastes from both plants and animals	
		Osmoregulation and excretory function of the kidney	
		LAB: PD: Distinguishing between urine samples	

	Movement in Plants		
		Phototropism, geotropism, auxin	12
		Use of plant hormones as herbicides	
	Implementation of Planning and Design	Recording data and presentation of implementation project.(Lab:AI: Litter survey)	
2	Movement in man	Structure and function of skeleton and movement in the forelimb	1-2
		LAB: MM: Modelling the action of the biceps	
	Irritability		
		Stimulus, Response and Nervous Pathway	3-4
		Reflex Arc, Structure and Function of the Brain.	
		Structure and Function of the Eye and Sight Defects	
		Structure and Function of the Skin.	
		LAB: MM: Invertebrate response to light and moisture	
		LAB: ORR: Sensitivity of human skin	
	Disease		
		Pathogenic, deficiency, hereditary and physiological diseases and their treatment/control.	5-6
		Effects of smoking, alcohol and drug abuse	
		Life cycle of vector of pathogenic disease and methods of control	
		Role of blood in immunity against disease	

		Immunisation and its role in preventing disease.	
		Impact of Disease on plant and animal diseases.	
		LAB: AI: Effect of body mass on resting pulse rate	
	Species and Speciation		7
		Natural Selection and Evolution of Species	
		LAB: AI: Modelling natural selection	
	Genetic Engineering	Mechanism of genetic engineering, advantages and disadvantages	8
	Completion of School Based Assessments and Preparation for CSEC Moderation	Practice laboratory work ,presentations etc	9
	Revision	Term review, Past papers etc.	10-11