

Module code	SB-2201		
Module Title	Plant Form and Function		
Degree/Diploma	Bachelor of Science (Biology)		
Type of Module	Major Core		
Modular Credits	4	Total student Workload	8 hours/week
		Contact hours	2 hours/week lectures 4 hours/week practicals
Prerequisite	SB-1201 Diversity of Life		
Anti-requisite	None		
Aims			
<p>This module will provide students with an understanding of basic plant morphology and its importance for the functioning of plants. Students will relate the internal structure of plants to their external morphology and the functions of the different plant organs. Students will also obtain an understanding of the development of plant structure, major morphological and eco-physiological adaptive innovations, and important plant groups over evolutionary time scales.</p> <p>This module is a major core module for Biology streams: Biological Sciences and Marine Science.</p>			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	30%	<ul style="list-style-type: none"> - Describe the vegetative and reproductive morphology of plants - Describe the inner functions of plants - Prepare and stain thin plant sections and recognize the cells and tissues in such sections - Identify the main plant groups and know the evolutionary relationships between them 	
Middle order :	60%	<ul style="list-style-type: none"> - Demonstrate how modifications of existing plant structures can lead to better environmental adaptations - Predict the life history strategies of plants based on their morphology - Predict plant traits based on their position in the evolutionary tree 	
Higher order:	10%	<ul style="list-style-type: none"> - Evaluate the limitations and advantages of certain plant traits for survival in specific environments - Assess how environmental change can provide advantages as well as disadvantages for certain plant groups due to their morphology - Predict the kind of plants can be expected in specific environments. 	
Module Contents			
<p>The main contents of this module are:</p> <ul style="list-style-type: none"> - Organology and vegetative structure of angiosperms and gymnosperms - Reproduction in flowering plants - Plant anatomy in relation to function and biomechanics - Morphological and anatomical adaptations to extreme environments - Evolution of the plant kingdom, and overview of the major plant groups - Plant life cycles 			
Assessment	Formative assessment	Students will apply the theory and methods in practicals under the supervision of the lecturers.	
	Summative assessment	<p>Examination: 60%</p> <p>Coursework: 40%</p> <ul style="list-style-type: none"> - Four (4) practical assignments (20%) - Two (2) tests (20%) 	