

Module code	SB-4332		
Module Title	Principles of Oceanography		
Degree/Diploma	Bachelor of Science (Biology)		
Type of Module	Major Option		
Modular Credits	4	Total student workload	8 hours/week
		Contact hours	6 hours/week
Prerequisite	None		
Anti-requisite	None		
Aims			
<p>The aim of this module is to gain the understanding of the physical, chemical, geological and biological aspects of the major water masses of the world and human dependency on these water masses. Oceanography is interesting because it involves so many of the sciences. The module emphasizes critical thinking, scientific processes, environmental issues, and interrelationships among disciplines.</p>			
Learning Outcomes:			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	40%	- Describe ocean processes within the physical, geological, chemical and biological realms	
Middle order :	40%	- Explain complex interactions in the ocean system - Identify the scientific process steps in research that they study	
Higher order:	20%	- Discuss ocean policy and analyze it from a scientific and social perspective - Work and learn independently	
Module Contents			
<ul style="list-style-type: none"> - Origin of the Earth and its oceans - Geography and physiography of ocean basins - Evolution of ocean basins (plate tectonics) - Oceanic sediment and sediment transport mechanisms - Chemical and physical characteristics of ocean water - Surface and subsurface circulation of ocean waters - Ocean-atmosphere interactions - Origin and description of waves and tides - Coastlines and their management - Marine organisms and their classification - Marine ecology and ecosystem description - Oceanic resources (physical, chemical and biological) - Pollution of the oceans (environmental issues) 			
Assessment	Formative assessment	Tutorial assignments and feedback	
	Summative assessment	Examination: 60% Coursework: 40% - 4 practical reports (20%) - 1 oral presentation (10%) - 1 class test (10%)	