

<b>Module code</b>	SG-2309		
<b>Module Title</b>	Marine Geology		
<b>Degree/Diploma</b>	Bachelor of Science (Geology)		
<b>Type of Module</b>	Major Option		
<b>Modular Credits</b>	4	<b>Total student Workload</b>	10 hours/week
		<b>Contact hours</b>	6 hours/week
<b>Prerequisite</b>	None		
<b>Anti-requisite</b>	None		
<b>Aims</b>			
<p>Students will be provided with all the information about the physical and chemical aspects of marine systems, including the interpretation of geophysical and geochemical data. The module involves study of sediment delivery processes from shelf to deep water, deposits, trace-fossil assemblages and bed-thickness distributions as an archive of controls. It will increase student awareness for ocean-geological process interactions, aiming at their civic and environmental education, stressing the crucial need for a sustainable use of the different marine resources.</p>			
<b>Learning Outcomes</b>			
<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"> <li>- understand the history, structure and geological processes of the Oceans</li> <li>- understand the circulation of ocean waters</li> <li>- evaluate the interrelationship between evolution of Oceans and humans</li> </ul>	
Middle order :	50%	<ul style="list-style-type: none"> <li>- identify and investigate environmental problems in the Oceans</li> <li>- explain the evolution of Oceans and to predict future developments</li> <li>- analyse marine data and to design marine explorations</li> </ul>	
Higher order:	20%	<ul style="list-style-type: none"> <li>- compute statistical data for the evolution of marine waters</li> <li>- recommend solutions for environmental hazards</li> <li>- judge for the discovery of submarine objects (e.g. shipwrecks, antiquities, geological formations, etc.), using geophysical data</li> <li>- design marine surveys</li> </ul>	
<b>Module Contents</b>			
<ul style="list-style-type: none"> <li>- Tectonics and morphology of the sea floor; ocean circulation and interaction with the atmosphere</li> <li>- The ocean as a chemical system; origin and distribution of marine sediments</li> <li>- Fundamentals of Paleoceanography and Paleoclimatology</li> <li>- Ocean's geologic and energy resources</li> </ul>			
<b>Assessment</b>	Formative assessment	Practical tests, assignments and feedback	
	Summative assessment	Examination: 50% Coursework: 50% <ul style="list-style-type: none"> <li>- 1 class test (25%)</li> <li>- 1 project in groups, with presentation (25%)</li> </ul>	