

<b>Module code</b>	SB-4313		
<b>Module Title</b>	Aquatic Biology		
<b>Degree/Diploma</b>	Bachelor of Science (Biology)		
<b>Type of Module</b>	Major Option		
<b>Modular Credits</b>	4	<b>Total student workload</b>	8 hours/week
		<b>Contact hours</b>	6 hours/week
<b>Prerequisite</b>	None		
<b>Anti-requisite</b>	None		
<b>Aims</b>			
The aim of this module is to gain the understanding of biological metabolisms and processes in aquatic ecosystems. All types of watery worlds are covered from poles to tropics with a special attention to the environments of Brunei. Abiotic environment and water properties in aquatic ecosystems are also covered.			
<b>Learning Outcomes:</b>			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	40%	<ul style="list-style-type: none"> <li>- Describe abiotic environment in aquatic ecosystems</li> <li>- Describe the metabolism of major aquatic organisms</li> <li>- Describe the food webs and ecosystem structure in the oceans</li> </ul>	
Middle order :	40%	<ul style="list-style-type: none"> <li>- Analyse and evaluate aquatic abiotic conditions</li> <li>- Analyse and evaluate aquatic primary production</li> <li>- Observe and identify zooplankton</li> <li>- Observe and identify fish</li> </ul>	
Higher order:	20%	<ul style="list-style-type: none"> <li>- Develop competence in laboratory skills</li> <li>- Work and learn independently</li> </ul>	
<b>Module Contents</b>			
<ul style="list-style-type: none"> <li>- Abiotic environment in aquatic ecosystems</li> <li>- Primary producers and primary production</li> <li>- Phytoplankton, seaweeds, seagrass</li> <li>- Zooplankton</li> <li>- Nekton</li> <li>- Benthos</li> <li>- Food webs and energy flows</li> <li>- The cycles of biogenic elements (carbon, nitrogen, phosphorus)</li> <li>- Lower invertebrates (sponges and cnidarians)</li> </ul>			
<b>Assessment</b>	Formative assessment	Tutorial assignments and feedback	
	Summative assessment	Examination: 60% Coursework: 40% <ul style="list-style-type: none"> <li>- 3 practical assignments (15%)</li> <li>- 1 oral presentation (5%)</li> <li>- 2 class tests (20%)</li> </ul>	