

<b>Module code</b>	SB-1202		
<b>Module Title</b>	Organisms and Environment		
<b>Degree/Diploma</b>	Bachelor of Science (Biology)		
<b>Type of Module</b>	Major Core		
<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 module is designed to provide a foundation in ecological principles, ecosystem functioning and a broad overview of natural environments on Earth. Development of an understanding of biotic and abiotic factors and interactions that influence the distribution of plants and animals geographically and temporally. Current issues relating to human impact on the global environment.			
<b>Learning Outcomes</b>			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	30%	- Examine ecological principles and the development of ecology as a science-based discipline - Appreciate the major features of global environments and how these affect the distribution of organisms	
Middle order :	60%	- Determine energy flow patterns that drive ecosystems - Identify current (and historical) issues relating to human impact on major biomes of the world - Determine the mechanisms of ecological functioning in various terrestrial and aquatic ecosystems	
Higher order :	10%	- Distinguish examples of biotic interactions between organisms, populations and communities and their ecological consequences	
<b>Module Contents</b>			
<ul style="list-style-type: none"> <li>- Biogeography of Asia</li> <li>- Island biogeography and conservation</li> <li>- Climate and plant distribution</li> <li>- Soils and plant distribution</li> <li>- Vegetation types</li> <li>- Decomposition; nutrient cycling; biogeochemical cycles</li> <li>- Population ecology: population dynamics</li> <li>- Models of population growth; inter- and intraspecific interactions</li> <li>- Marine ecology: properties of seawater; marine microbes</li> <li>- Primary producers in the ocean and marine food webs and energy flows</li> <li>- Community ecology</li> <li>- The global biodiversity crisis: global trends and predictions</li> </ul>			
<b>Assessment</b>	Formative assessment	Tutorial assignments and feedback	
	Summative assessment	Examination: 60% Coursework: 40% -3 practical reports (30%) -1 class test (10%)	