Module code	SB-2332		
Module Title	Marine Ecosystems		
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

To obtain the understanding of biological, chemical, and physical processes in marine ecosystems and to obtain the skills and knowledge to perform field and laboratory works to survey marine environments.

Learning Outcomes:

On successful completion of this module, a student will be expected to be able to:

Lower order :	10%	- Describe the basic biological, chemical, and physical processes in marine ecosystems - Describe environmental problems in marine ecosystems
Middle order :	10%	- Obtain the skills for field and laboratory works to survey marine environments - Propose research designs to survey marine ecosystems and to tackle environmental problems
Higher order:	80%	- Perform field and laboratory works to survey marine environments - Analyse data and make critical discussion - Perform oral presentations on practical works - Write a report on field and laboratory works individually

Module Contents

- Estuaries (physical characteristics of estuaries, seagrass beds, mud flats, mangrove swamps)
- Intertidal communities (sandy beaches, rocky shores)
- Coral reefs (reef formation, coral reef ecology, biodiversity, threats to coral reefs)
- Continental shelves (hard-bottom communities, kelp communities, soft-bottom communities)
- Open ocean (physical characteristics of open ocean, plankton, nekton)
- Humans and the sea (commercial fishing, pollution, climate change, coastal development)
- Laboratory and field work skills to study marine sciences

Assessment	Formative assessment	Weekly discussion and short questions will be used to test students' understanding.
	Summative assessment	Examination: 0%
		Coursework: 100% - 2 individual written reports (30%) - 2 group presentations (40%) - 2 class tests (30%)