Module code	SB-4305		
Module Title	Entomology		
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	SB-2206 Principles of Animal Physiology		
Anti-requisite	None		

Aims

This module aims to provide students with a basic understanding of entomology. Students will learn about the insect body form, insect physiology and behaviour, and the diversity of insects. Students will learn about insect ecology and the economic importance of insects from medical and agricultural perspectives.

Learning Outcomes:

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

Lower order :	10%	- Describe basic body form, physiology and ecology of insects - Describe a general classification of insects
Middle order :	10%	- Analyse complex functional processes concerning metabolism, gas exchange, water balance, and sensory physiology of insects - Describe insect ecology and conservation - Describe the economic significance of insects to man, in terms of their medical and agricultural importance
Higher order:	80%	- Perform identification and classification of insects using diagnostic features of specific taxa (orders), and use these to identify and classify insects - Undertake and independent collection of insects in Brunei and apply methods to pin, label, sort and display insects in a comprehensive collection - Review the evolution of body form of insects

Module Contents

- The insect body form
- The integument and appendages
- Insect classification; Apterygota, Pterygota, Endopterygota, Exopoterygota
- Reproduction, moulting and diapause
- Nutrition and feeding; mouthpart structure, phytophagy and entomophagy
- Physiology; Metabolism, gas exchange, water balance, nitrogen excretion and thermoregulation
- Sensory physiology; communication and eusociality in insects
- Insect community ecology and conservation
- The economic importance of insects I; medical and veterinary entomology, plant-insect interactions
- The economic importance of insects II; biological control and pest management

Assessment	Formative assessment	Tutorial assignments and feedback
	Summative assessment	Examination: 0%
		Coursework: 100% - 2 class tests (40%) - 6 practical reports (40%) - 1 mini-project: Insect collection (20%)