

Module code	SB-4333		
Module Title	Ichthyology		
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-1201 Diversity of Life; SB-1202 Organisms and Environment; SB-2203 Animal Form and Function		
Anti-requisite	None		
Aims			
The aim of this module is to gain a basic knowledge of fish biodiversity and fish biology, at the organism, population and ecosystem levels.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order:	10%	-Identify and differentiate the major taxa (subclass level) of cartilaginous and bony fishes (Chondrichthyes, Osteichthyes: Actinopterygii, Sarcopterygii: Dipnomorpha, Actinistia)	
Middle order:	10%	-Describe the structures and functions of fishes at the organism level	
Higher order:	80%	-Relate physical, chemical and biological parameters in controlling the abundance and diversity of fishes -Evaluate the role of fishes in aquatic and terrestrial ecosystems	
Module Contents			
<ul style="list-style-type: none"> - Brief history of ichthyology - Introduction to morphological and molecular systematics - Fish taxonomy and systematics - Locomotion, feeding and respiration - Sensory systems (vision, mechano-, chemo-, electromagnetic reception) - Homeostasis I: hydrostatic balance, thermoregulation, nutrition, energetics - Homeostasis II: excretion, pH, hydromineral balance, endocrine, autonomic and immune systems - Fish reproductive biology (tokology) - Life history: ontogeny and eco-evolutionary aspects - Behavioural and population ecology (cyclic behaviours, migrations) - System ecology (trophic guilds, trophic cascades, food webs, ecosystem engineering) - Fish biogeography and habitat diversity - Fish conservation and management 			
Assessment	Formative assessment		Tutorial assignments and feedback
	Summative assessment		Examination: 0%
			Coursework: 100% - 2 practical reports (20%) - 3 written assignments (30%) - 5 literature-review assignments (30%) - 2 oral presentations (20%)