

Module code	SB-1203		
Module Title	Skills in Biological Sciences		
Degree/Diploma	Bachelor of Science (Biology)		
Type of Module	Major Core		
Modular Credits	4	Total student Workload	8 hours/week
		Contact hours	6 hours/week
Prerequisite	None		
Anti-requisite	None		
Aims			
The aims of this module are to provide students with hands-on experience in practical biology skills, improve their ability to write technical papers and make oral presentations in a professional scientific format, and introduce them to bio-statistical analyses.			
Learning Outcomes			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	10%	- Describe basic tools used in biological inquiry with an emphasis on organisational skills, critical thinking, laboratory skills, methods of science, hypothesis testing and presentation skills, and biostatistical analyses.	
Middle order :	10%	- Analyse and understand how to effectively interpret and communicate results, experiments and published literature in a variety of formats.	
Higher order:	80%	- Connect the concepts and approaches to allow hypothesis testing and experimentation leading to novel interpretations and discoveries. - Work and conduct experiments effectively in groups.	
Module Contents			
<ul style="list-style-type: none"> - Overview of basic biology skills - Organisational skills and, basic laboratory and reasoning skills - Methods of science and hypothesis testing - Presentation skills and critical thinking - Effective interpretation and communication of results, experiments and published literature - Probability distributions and descriptive statistics - Measurement analysis - Hypotheses testing and analysis of variance - Data transformations - Simple linear regression and correlation - Contingency tables 			
Assessment	Formative assessment	Weekly feedback, tutorial and discussion	
	Summative assessment	Examination: 0% Coursework: 100% <ul style="list-style-type: none"> - 4 individual assignments (40%) - 2 individual laboratory skills practical report (20%) - 1 individual class test (15%) - 1 group mini project (10%) - 1 group presentation (5%) - 1 individual oral/interview assessment (10%) 	