

<b>Module code</b>	SB-1203		
<b>Module Title</b>	Skills in Biological Sciences		
<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 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.			
<b>Learning Outcomes</b>			
<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.	
<b>Module Contents</b>			
<ul style="list-style-type: none"> <li>- Overview of basic biology skills</li> <li>- Organisational skills and, basic laboratory and reasoning skills</li> <li>- Methods of science and hypothesis testing</li> <li>- Presentation skills and critical thinking</li> <li>- Effective interpretation and communication of results, experiments and published literature</li> <li>- Probability distributions and descriptive statistics,</li> <li>- Measurement analysis</li> <li>- Hypotheses testing and analysis of variance</li> <li>- Data transformations</li> <li>- Simple linear regression and correlation</li> <li>- Contingency tables</li> </ul>			
<b>Assessment</b>	Formative assessment	Tutorial assignments and feedback	
	Summative assessment	Examination: 0% Coursework: 100% <ul style="list-style-type: none"> <li>- 3 written assignments (25%)</li> <li>- 1 oral presentation (5%)</li> <li>- 1 scientific poster development (5%)</li> <li>- 1 laboratory skills practical (15%)</li> <li>- 2 written statistics assignments (20%)</li> <li>- 1 mini-project (30%)</li> </ul>	