

<b>Module code</b>	SB-2211		
<b>Module Title</b>	Genetics		
<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 module is designed for students to have a fundamental understanding of classical and molecular genetics.			
<b>Learning Outcomes</b>			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	60%	<ul style="list-style-type: none"> <li>- Explain the basic principles of mitosis and meiosis</li> <li>- Identify the Mendelian and non-Mendelian inheritance</li> <li>- Describe the chromosomal basis of inheritance</li> <li>- Describe DNA as genetic material</li> <li>- Describe gene expression and its regulation</li> </ul>	
Middle order :	30%	<ul style="list-style-type: none"> <li>- Analyse genetic crosses using Punnett square</li> <li>- Interpret genetic code</li> </ul>	
Higher order:	10%	<ul style="list-style-type: none"> <li>- Develop competence in laboratory skills</li> <li>- Work and learn independently</li> </ul>	
<b>Module Contents</b>			
<ul style="list-style-type: none"> <li>- The cell cycle</li> <li>- Meiosis and sexual life cycles</li> <li>- Mendelian and non-Mendelian inheritance</li> <li>- The chromosomal basis of inheritance</li> <li>- DNA as genetic material</li> <li>- Gene expression</li> <li>- Regulation of gene expression</li> </ul>			
<b>Assessment</b>	Formative assessment	Tutorial assignments and feedback	
	Summative assessment	Examination: 70%	
		Coursework: 30%	
		<ul style="list-style-type: none"> <li>- 4 practical assignments (20%)</li> <li>- 2 class tests (10%)</li> </ul>	