

<b>Module code</b>	SP-4290		
<b>Module Title</b>	Physics Project		
<b>Degree/Diploma</b>	Bachelor of Science (Applied Physics)		
<b>Type of Module</b>	Major Core		
<b>Modular Credits</b>	8	<b>Total student Workload</b>	10 hours/week
		<b>Contact hours</b>	8 hours/week
<b>Prerequisite</b>	SP-1201 and SP-2201		
<b>Anti-requisite</b>	None		
<b>Aims</b>			
This module aims to introduce students to the methodology of conducting scientific research.			
<b>Learning Outcomes</b>			
<i>On successful completion of this module, a student will be expected to be able to:</i>			
Lower order :	10%	<ul style="list-style-type: none"> <li>- understand the application of physics concepts in different contexts</li> <li>- know and understand ways of solving problems through execution of practical investigations and other methods of performing scientific research</li> </ul>	
Middle order :	10%	<ul style="list-style-type: none"> <li>- research, retrieve and combine data from different information sources</li> <li>- conduct and report on the testing of hypotheses and evaluate data and assumptions</li> <li>- apply appropriate scientific and mathematical principles in analysing physical problems</li> <li>- collect, record and analyse data using suitable techniques</li> <li>- process data and assess their reliability to determine the significance of results</li> <li>- relate results to relevant theories in physics</li> </ul>	
Higher order :	80%	<ul style="list-style-type: none"> <li>- critically evaluate data by considering methodology and accuracy during collection, recording and analysis of data</li> <li>- critically make judgements to identify a range of solutions to a problem</li> <li>- solve problems using theoretical, practical and/or computational methods</li> <li>- follow proper procedures and protocols when conducting practical work</li> <li>- communicate effectively in written, oral and graphical forms</li> <li>- identify individual goals and work independently</li> <li>- adopt good time management skills</li> <li>- work cooperatively in a team</li> <li>- participate actively in group discussions and problem solving sessions</li> </ul>	
<b>Module Contents</b>			
<ul style="list-style-type: none"> <li>- A project will be taken under the supervision of a member of staff.</li> <li>- The project will normally be investigative and/or exploratory.</li> <li>- The project will involve the application of the concepts of physics.</li> <li>- The student is expected to develop existing skills and acquire new ones in a range of areas including laboratory skills, especially of physical measurements, good time management skills, good data gathering methods and data analysis and interpretation skills</li> <li>- The student is also expected to develop good scientific reporting skills.</li> </ul>			
<b>Assessment</b>	Formative assessment	Meetings, discussions and submission of preliminary reports	
	Summative assessment	Examination: 0% Coursework: 100% <ul style="list-style-type: none"> <li>- 2 project reports - Assessed by supervisor(s) and internal examiner (60%)</li> <li>- Student's effort and initiative - Assessed by supervisor(s) (25%)</li> <li>- 1 oral presentation - Assessed by academic staff (15%)</li> </ul>	