

Module code	SP-4290		
Module Title	Physics Project		
Degree/Diploma	Bachelor of Science (Applied Physics)		
Type of Module	Major Core		
Modular Credits	8	Total student Workload	10 hours/week for 2 semesters
		Contact hours	4 hours/week for 2 semesters
Prerequisite	SP-1205 Experimental and Mathematical Skills in Physics		
Anti-requisite	None		
Aims This module aims to introduce students to the methodology of conducting <u>scientific research</u> .			
Learning Outcomes <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"> - understand the application of physics concepts in different contexts - know and understand ways of solving problems through execution of practical investigations and other methods of performing scientific research 	
Middle order:	10%	<ul style="list-style-type: none"> - research, retrieve and combine data from different information sources - conduct and report on the testing of hypotheses and evaluate data and assumptions - apply appropriate scientific and mathematical principles in analysing physical problems - collect, record and analyse data using suitable techniques - process data and assess their reliability to determine the significance of results - relate results to relevant theories in physics 	
Higher order:	80%	<ul style="list-style-type: none"> - critically evaluate data by considering methodology and accuracy during collection, recording and analysis of data - critically make judgements to identify a range of solutions to a problem - solve problems using theoretical, practical and/or computational methods - follow proper procedures and protocols when conducting practical work - communicate effectively in written, oral and graphical forms - identify individual goals and work independently - adopt good time management skills - work cooperatively in a team - participate actively in group discussions and problem solving sessions 	
Module Contents <ul style="list-style-type: none"> - A project will be taken under the supervision of a member of staff. - The project will normally be investigative and/or exploratory. - The project will involve the application of the concepts of physics. - 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 - The student is also expected to develop good scientific reporting skills. 			
Assessment	Formative assessment	Meetings, discussions and submission of preliminary reports	
	Summative assessment	Examination: 0% Coursework: 100% <ul style="list-style-type: none"> - 2 project reports - Assessed by supervisor(s) and internal examiner (60%) - Student's effort and initiative - Assessed by supervisor(s) (25%) -1 oral presentation - Assessed by academic staff (15%) 	