

Faculty	Natural Sciences		
Home Department	Physics and Astronomy		
Module Topic	Mechanics		
Generic Module Name	Physics 111		
Alpha-numeric Code	PHY111		
NQF Level	15		
NQF Credit Value	5		
Duration	Semester		
Proposed semester to be offered	First Semester		
Programmes in which the module will be offered	BSc (Physical Science) (3233); BSc (Mathematics and Statistical Sciences) (3277); BSc (Chemical Science) (3220); BSc (Computer Science) (3221)		
Year level	1		
Main Outcomes	<p>On completing of this module students should be able to:</p> <ul style="list-style-type: none"> • Have knowledge and understanding of introductory mechanics of kinematics, dynamics and applications. • Be able to apply mechanics theory in everyday life situations. • Be able to work in a laboratory environment and record, represent and interpret data. 		
Main Content	<ul style="list-style-type: none"> • Introduction to vectors • Kinematics: Motion in one dimension and in a plane • Dynamics: Newton's laws of motion and their applications • Application of Newton's laws: Translational equilibrium, circular motion, gravitational forces and fields, satellite motion. • Work and energy • Impulse and momentum • Rotational Equilibrium 		
Pre-requisite modules	None		
Co-requisite modules	Calculus (Mathematics)		
Prohibited module Combination	PHY113, PHY118		
Breakdown of Learning Time	Hours	Timetable Requirement per week	Other teaching modes that does not require time-table
<i>Contact with lecturer / tutor:</i>	42	<i>Lectures p.w.</i>	3
<i>Assignments & tasks:</i>	0	<i>Practicals p.w.</i>	3
<i>Practicals:</i>	42	<i>Tutorials p.w.</i>	1
<i>Tutorials:</i>	14		
<i>Tests & Examinations:</i>	9		
<i>Selfstudy:</i>	43		
<i>Other:</i>	0		
Total Learning Time	150		
Methods of Student Assessment	Continuous Assessment (CA): 60% Final Assessment (FA): 40%		
Assessment Module type	Continuous and Final Assessment (CFA)		