

Programme	Semester 2	Course Code	GC-110	Credit Hours	3
Course Title	Applied Physics				
Course Introduction					
<ul style="list-style-type: none"> To develop knowledge and understanding of the basic laws and principles of physics, their practical applications and to develop an appreciation of how these laws and principles operate in experimental and applied physics. 					
Learning Outcomes					
On the completion of the course, the students will:					
<ol style="list-style-type: none"> Concept of Motions Dimensions 					
Course Content				Assignments/Readings	
Week 1	Review of Vector Motion				
Week 2	position, velocity, and acceleration vectors.				
Week 3	Applications of laws of motion: Projectile Motion				
Week 4	motion in resistive media, rocket motion, motion of charged particles in electrical and magnetic fields				
Week 5	Rotational motion: constant angular acceleration				
Week 6	uniform circular motion, torque				
Week 7	linear and angular momentum				
Week 8	System of Particles: center of mass,				
Week 9	two-body collisions in two-dimensions,				
Week 10	moment of inertia of objects,				
Week 11	Wave Motion				

Week 12	conservation, mathematical concepts of simple and damped harmonic motion,.	
Week 13	analytical treatments of superposition of waves, and related concepts	
Week 14	Revision	
Week 15	Revision	
Week 16	Revision	
Textbooks and Reading Material		
1. Freedman & Young. University Physics (10th or higher editions), 2. Resnick, Halliday & Krane. College Physics (6th and higher edition).		
Teaching Learning Strategies		
1. Lectures 2. Written Assignments 3. Quizzes		
Assignments: Types and Number with Calendar		
1. Quiz 2. Presentation 3. Assignment		