## 2019-2020 Academic Year

## **Physics Department**

## $(Core-Skill\ and\ Knowledge)$

## **Course description**

Course code	Phys 101			
Credit	3 credits (Lecture 2 + Lab1)			
Course Title	College Physics			
Course Coordinator	Dr Thandar Htoon			
Prerequisite	None			
Course Description	Mechanics, Thermodynamics, Vibrations and Waves			
Objectives	<ul> <li>To provide the student with a clear and logical presentation of the basic concepts and principles of physics</li> <li>To strengthen an understanding of the concepts and principles through a broad range of interesting applications in today's information technological area</li> </ul>			
Student Learning Outcomes	<ul> <li>Be able to identify and describe the basic laws of classical mechanics, thermal physics and wave motion</li> <li>Be able to apply the basic laws of physics to the solution of conceptual and quantitative problems</li> </ul>			
Topics Covered	The chapters are covered by Kinematics, Dynamics in Newton's Laws of Motion, Collisions and Linear Momentum, Rotational Motion, Thermodynamics, Vibrations and Waves.			
Text book and Reference	<ul> <li>College Physics "by Raymond A.Serway and Chris Vuille", 11<sup>th</sup> Edition (Global Edition) ISBN-13: 978-1337620338</li> <li>Physics for Scientists and Engineers 9<sup>th</sup> edition (SERWAY), University Physics 14<sup>th</sup> edition (Hugh.D.Young and Roger A.Freedom), Fundamentals of Physics 10<sup>th</sup> edition (Jearl Walker, David Halliday, Robert Resnick)</li> </ul>			
Lesson Plan	Mechanics:     Topic (2) Motion in One Dimension     Topic (3) Vectors and Two- Dimensional Motion     Topic (4) The Laws of Motion     Topic (6) Momentum and Collisions     Topic (7) Rotational Motion and the Law of Gravity Thermodynamics:     Topic (11) Energy in Thermal Physics     Topic (12) The Laws of Thermodynamics Vibrations and Waves:     Topic (14) Sound			
Assessment Plan	1. Examination (50 %) 2. Attendance (10%) 3. Assignment/Tutorial (20 %) 4. Practical /Lab test (20%)			