

	Course name: PHYS101 Physics I		Department: Mechanical Engineering				Semester
							1
	Methods of Education						Credit (ECTS)
	Lecture	Recitation/ (Etud)	Lab	Project/Field Study	Homework	Other	Total
70	50			40	20	180	6
Language	English						
Compulsory/Elective	Compulsory						
Prerequisites	None						
Course Contents	<p>Vectors. Motion in one and two dimensions. Newton's laws and its applications. Work and Energy. Conservation of mechanical energy. Momentum and motion of systems. Static equilibrium of rigid bodies. Rotation and angular momentum. Newton's law universal gravitation.</p>						
Course Objectives	Understanding the fracture behavior of materials.						
Learning Outcomes and Competences	<p>Student, who passed the course satisfactorily can:</p> <ol style="list-style-type: none"> 1. Basic operation with vectors(addition , scalar and vectorial product) 2. Kinematics in one and two dimensions 3. Application of Newton's laws to fundamental problems of mechanics 4. Concept of conservative force 5. Mechanics of rigid bodies rotating about a fix a axis and gyroscope motion 6. Using conservation laws when direct integration of motion is not feasible 7. Basic applications of Newton universal gravitation law 						
Textbook and /or References	Physics I For Scientist And Engineers - Serway						
Assessment Criteria			If any, mark as (X)		Percentage (%)		
	Midterm Exams		X		40		
	Quizzes						
	Homeworks						
	Projects						
	Term Paper						
	Laboratory work						
	Other						
Final Exam		X		60			
Instructors							