

FACULTY OF ENGINEERING
1st Year 1st Semester

FIZ 103 Physics I				FACULTY OF ENGINEERING					
Semester	Methods of Education							Credits	
	Lecture	Recit.	Lab.	Project / Field Study	Homework	Other	Total	Credit	ECTS Credit
1	56		-	-	42	63	161	4	6.0
Language	Turkish / English								
Compulsory / Elective	Compulsory								
Prerequisites	None								
Course Contents	Physics and Measurement, One Dimensional Motion, Two Dimensional Motion, Laws of Motion, Circular Motion and Other Applications of Laws of Newton, Work and Kinetic Energy, Potential Energy and Energy Conservation, Linear Momentum and Collisions, Rotation of Solid Bodies About A Fixed Axis, Rolling Motion and Angular Momentum, Static Equilibrium and Elasticity, Vibraton, The Law of Gravity, Fluid Mechanics, Temperature, Heat and First Law of Thermodynamics, The Kinetic Theory of Gases, Heat Machines, Entrophy and Second Law of Thermodynamics.								
Course Objectives	The goal of this course is to understand the basic concepts of physics and facilitate the understanding of solutions and analysis of engineering problems.								
Learning Outcomes and Competences	The problem-solving ability is developed owing to understanding of basic physics concepts.								
Textbook and /or Reference	PHYSICS, For Scientists and Engineers with Modern Physics, R.Serway,Saunders College Publishing, 1990.								
Assessment Criteria						If any, mark as (x)		Percentage (%)	
	Midterm Exams					X		60	
	Quizzes								
	Homeworks								
	Projects								
	Term Paper								
	Laboratory Work								
	Other								
	Final Exam					X		40	
Instructors									
Week	Subject								
1	Physics and Measurement-Vectors								
2	One Dimensional Motion								
3	Two Dimensional Motion								
4	Laws of Motion, Circular Motion and Other Applications of Laws of Newton								
5	Work and Kinetic Energy, Potential Energy and Energy Conservation								
6	Linear Momentum and Collisions								
7	Rotation of Solid Bodies About A Fixed Axis								
8	I. MIDTERM								
9	Rolling Motion and Angular Momentum, Static Equilibrium and Elasticity								
10	Vibraton, The Law of Gravity								
11	II. MIDTERM								
12	Fluid Mechanics, Temperature								
13	Heat and First Law of Thermodynamics, The Kinetic Theory of Gases								
14	Heat Machines, Entrophy and Second Law of Thermodynamics								