



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Introduction to Basic Physics							
Course Code		FİZ173		Course Level		Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	103 (<i>Hours</i>)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		Objective of this course is to introduce laws of motion and to apply them to various situations, and to establish a relationship between the force, work and energy while emphasizing universality of these concepts.							
Course Content		Vectors, Describing motion, Laws of motion and its applications, Work and energy, Conservation of Energy and Momentum, Rotational, Vibrational Motion and Waves. Laws of motions and fluid mechanics and thermodynamics.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion, Problem Solving					
Name of Lecturer(s)		Ins. Muhittin TURAN							

Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	30
Final Examination	1	70
Quiz	2	10

Recommended or Required Reading

1	Üniversite Fiziği Cilt I , H.D.Young, R.A.Freedman
2	Fen ve Mühendisler için Fizik 1 (Mekanik) , R.A. Serway, R.J. Beichner
3	Fiziğin Temelleri , David Halliday, Robert Resnick, and Pearl Walker

Week	Weekly Detailed Course Contents	
1	Theoretical	Physical quantities, vectors and scalars
2	Theoretical	Motion in one dimension
3	Theoretical	Vectors and Motion in two dimension
4	Theoretical	Laws of motion and dynamics
5	Theoretical	Circular motion and other applications of Newton's Laws
6	Theoretical	Work, kinetic and potential energy
7	Theoretical	Linear momentum and collisions
8	Intermediate Exam	Midterm Exam
9	Theoretical	Rotation of rigid bodies, Rolling motion and angular momentum
10	Theoretical	Rotation of rigid bodies, Rolling motion and angular momentum
11	Theoretical	Elasticity and vibration motion
12	Theoretical	Waves and basic properties
13	Theoretical	Introduction to fluid physics
14	Theoretical	Kinetic theory and heat and temperature
15	Theoretical	Thermodynamics Principles and basic examples

Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	4	70
Quiz	2	2	0.5	5
Midterm Examination	1	10	2	12
Final Examination	1	14	2	16
Total Workload (Hours)				103
[Total Workload (Hours) / 25*] = ECTS				4

*25 hour workload is accepted as 1 ECTS



Learning Outcomes

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