



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Physics I							
Course Code		FİZ161		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	5	Workload	124 ( <i>Hours</i> )	Theory	3	Practice	0	Laboratory	0
Objectives of the Course		To teach the fundamental topics in the field of mechanics and dynamics.							
Course Content		Motion in one dimension, laws of motion, Momentum and collisions, thermodynamics, fluid mechanics.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Discussion					
Name of Lecturer(s)		Assoc. Prof. Melis GÖKÇE, Lec. Onur GENÇ, Lec. Şerife Gökçe ÇALIŞKAN, Prof. Aytaç Gürhan GÖKÇE							

### Assessment Methods and Criteria

Method	Quantity	Percentage (%)
Midterm Examination	1	40
Final Examination	1	70

### Recommended or Required Reading

1	. Serway, Physics I
2	Young ve Freedmann, University Physics I

Week	Weekly Detailed Course Contents	
1	Theoretical	Physics and Measurement
2	Theoretical	Motion in one Dimension
3	Theoretical	Vectors
4	Theoretical	Motion in two Dimensions
5	Theoretical	The Laws of Motion
6	Theoretical	Circular Motion and Other Applications of Newton's Laws
7	Theoretical	Conservation of Energy
8	Intermediate Exam	Midterm exam
9	Theoretical	Linear Momentum and Collisions
10	Theoretical	Rotation of a Rigid Object About a Fixed Axis
11	Theoretical	Angular Momentum
12	Theoretical	Static Equilibrium and Elasticity
13	Theoretical	Universal Gravitation.
14	Theoretical	Fluid Mechanics
15	Final Exam	Final Exam

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	15	3	3	90
Midterm Examination	1	10	2	12
Final Examination	1	20	2	22
Total Workload (Hours)				124
[Total Workload (Hours) / 25*] = ECTS				5

\*25 hour workload is accepted as 1 ECTS

### Learning Outcomes

1	To be able to learn the fundamentals of the motion
2	To be able to learn the fundamentals of the dynamics and to apply them
3	To be able to learn the fundamentals of work and energy
4	To be able to learn the fundamentals of angular momentum



5	To be able to learn the fundamentals of Angular kinematics
6	To be able to learn the fundamentals of the vibrational motion

