AYDIN ADNAN MENDERES UNIVERSITY
COURSE INFORMATION FORM

Course Title	Introduction to Basic Physics						
Course Code	FİZ173		Couse Level	Short Cycle (Associate's Degree)			
ECTS Credit	4	Workload	103 *(Hours)*	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

1	
2	
3	
4	
5	

Programme Outcomes *(Computer - Aided Design and Animation)*

1	Using the basic knowledge and skills acquired in the field, interpret and evaluate data, identify problems, to analyze, to have the ability to develop evidence-based solutions.
2	To select and effectivly use modern techniques that are for applications relevant to the filed
3	Gaining the application skill by examining the relevant processes in industrial and service sector
4	To find solution when encounters unforeseen situations in the field, to gain the ability to be able to take responsibility in a team or make individual research.
5	To gain the awareness of the need for lifelong learning, continuous self-renewal monitoring and awareness of developments in science and technology
6	To gain the ability to use computer software and hardware required by the basic level of the field.
7	To be conscious about occupational safety, occupational health, environmental protection and quality.
8	Effective communication and follow the innovations in the field.
9	In mathematics, science and engineering directed to his/her field of basic theoretical and practical knowledge.
10	Having the planning skills related to Computer Aided Design and Animation program to meet the needs of the sector.
11	Gaining skills on technical drawing, computer-aided drafting, design using simulation programs in the field of making and using a variety of software systems and components to choose, to calculate the basic sizing, draw plans and projects.
12	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
13	Ability to plan a career in their own profession.

Contribution of Learning Outcomes to Programme Outcomes *1:Very Low, 2:Low, 3:Medium, 4:High, 5:Very High*

	L1	L2	L3	L4	L5
P5	2	3	3	3	3