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 *(Electrics)*	
1	ABILITY TO MAKE APPLICATIONS OF MEASUREMENT AND CALCULATION
2	ABILITY TO MAKE CONNECTIONS OF A DC CIRCUIT
3	ABILITY TO MAKE BASIC ELECTRONIC CIRCUIT AND APPLICATIONS
4	ABILITY TO MAKE ELECTRIC INSTALLMENT APPLICATIONS
5	ADAPTING VOCATIONAL ETHICAL VALUES
6	ABILITY TO MAKE COMMUNICATION
7	ABILITY TO MAKE CONNECTIONS OF AC CIRCUIT
8	ABILITY TO MAKE NUMERICAL CIRCUITS
9	ABILITY TO MAKE INSTALLATIONS OF TRANSFORMER AND DC ELECTRIC MACHINES
10	ABILITY TO MAKE COMPUTER AIDED DESIGN
11	ABILITY TO APPLY VOCATIONAL TECHNICAL METHODS
12	ABILITY TO MAKE INSTALLATIONS OF AC ELECTRIC MACHINES
13	ABILITY TO MAKE SPECIAL ELECTRIC INSTALLMENTS
14	ABILITY TO MAKE INSTALLMENTS OF COMMAND SYSTEMS
15	ABILITY TO DRAW COMPUTER AIDED ELECTRIC SCHEME
16	ABILITY TO MAKE POWER ELECTRONICS CIRCUITS
17	ABILITY TO MAKE SYSTEM ANALYSIS AND PRODUCT DESIGN
18	ABILITY TO IMPROVE ONESELF UTILIZING INFORMATION OPPORTUNITIES
19	ABILITY TO DRAW COMPUTER AIDED ELECTRIC INSTALLMENT PROJECT
20	ABILITY TO MAKE ANALYSIS AND MAINTENANCE OF ELECTRICAL ENERGY PRODUCTION SYSTEMS
21	ABILITY TO MAKE THE WINDING OF ACCURATE AND ALTERNATIVE CURRENT ENGINES
22	ABILITY TO RECOGNIZE SYSTEMS USED IN ELECTRICAL ENERGY TRANSMISSION AND DISTRIBUTION AND TROUBLESHOOTING
23	Ability to use the methods and techniques of career planning and discussing the effects of character traits on career preferences.
24	Ability to plan a career in their own profession.
25	To provide them with knowledge about substance use and addiction problem and prevention methods.

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

	L1	L2	L3	L4	L5
P7	3	3	3	3	3
P9	3	3	3	3	3
P21	3	3	3	3	3