



## AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Mechanics							
Course Code		FİZ115		Course Level		First Cycle (Bachelor's Degree)			
ECTS Credit	3	Workload	81 (Hours)	Theory	2	Practice	0	Laboratory	0
Objectives of the Course		to introduce Newton's motion laws and to apply them to various problems, to denote the relationship with work and energy and to establish the relationship with motion and force among nature laws							
Course Content		Motion in one dimension, laws of motion, Momentum and collisions, thermodynamics, fluid mechanics, Circular motion and other applications of Newton's Laws, Work, kinetic and potential energy, Rotation of rigid bodies, Rolling motion and angular momentum, Elasticity and vibration motion, Gravitation force and Kepler's laws.							
Work Placement		N/A							
Planned Learning Activities and Teaching Methods				Explanation (Presentation), Case Study, Problem Solving					
Name of Lecturer(s)		Lec. Onur GENÇ, Lec. Şerife Gökçe ÇALIŞKAN, Prof. Ethem AKTÜRK							

### Assessment Methods and Criteria

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

### 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	Motion in two dimension
4	Theoretical	Laws of motion and dynamics
5	Theoretical	Laws of motion and dynamics
6	Theoretical	Circular motion and other applications of Newton's Laws
7	Theoretical	Work, kinetic and potential energy
8	Intermediate Exam	Midterm Exam
9	Theoretical	Work, kinetic and potential energy
10	Theoretical	Linear momentum and collisions
11	Theoretical	Linear momentum and collisions
12	Theoretical	Rotation of rigid bodies, Rolling motion and angular momentum
13	Theoretical	Rotation of rigid bodies, Rolling motion and angular momentum
14	Theoretical	Elasticity and vibration motion
15	Theoretical	Gravitation force and Kepler's laws

### Workload Calculation

Activity	Quantity	Preparation	Duration	Total Workload
Lecture - Theory	14	1	2	42
Midterm Examination	1	15	2	17
Final Examination	1	20	2	22
Total Workload (Hours)				81
[Total Workload (Hours) / 25*] = ECTS				3
*25 hour workload is accepted as 1 ECTS				

### Learning Outcomes

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**Programme Outcomes (Horticulture)**

1	Ability to examine agricultural problems under the light of basic science, mathematics, and agriculture knowledge
2	Ability to plan and apply in different agricultural systems in horticultural crop plants
3	To constitute and realize breeding programmes according to market demands
4	Ability to propagate any kinds of stock materials in horticultural crop plants
5	Ability of transfer of modern technologies to production
6	Ability to have a consciousness of quality in production, storage, and evaluation in horticultural crop plants (To measure, evaluate, and manage different quality parameters)
7	To think analytically of protecting, providing transfer to future, and having responsibility to environment of all plant materials belong to horticultural crop plants area
8	Ability to search, think analytically, reach to knowledge, and obtain solution for solving of agricultural problems (Project, homework, thesis, summer training)
9	Ability to be aware of agricultural problems, to follow them, and to communicate own ideas of these subjects by verbal and written ways (Turkish, social course)
10	To be able to perform in a teamwork
11	Ability to work independently, give decision, and Express own thoughts by occupational-ethic values verbal and written ways in horticultural crop plants
12	Ability to think creatively, innovatively, and analytically, to comprehend the need of lifelong learning, be a part of a related subjects in a web of communication, and to develop by social means

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

	L1	L2	L3	L4	L5	L6
P1	5	5	5	5	5	5
P5	5	5	5	5	5	5

