



AYDIN ADNAN MENDERES UNIVERSITY COURSE INFORMATION FORM

Course Title		Basic Mechanics							
Course Code		FİZ115		Couse 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 (Agricultural Biotechnology)

1	To be able to develop skills in identifying, modeling and solving problems in agricultural biotechnology
2	To be able to synthesize life and engineering sciences for the effective resource planning of agricultural biotechnology applications
3	To be able to interpret about living organisms structure, metabolic and physiological processes in order to propose biotechnological solutions to the agricultural problems
4	To be able to analyze genomic, metabolomic and proteomic information via bioinformatic tools.
5	To have the ability to analyze collected data and interpret the results.
6	To have the ability of individual working ability and to make independent decisions, to work in inter-disciplinary and interdisciplinary teamwork, to communicate by expressing their ideas orally and in writing, clearly and concisely
7	To have the awareness of professional liabilities and ethics
8	To be able to follow current national and international problems

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	2	2	2	2	2	1
P2	4	4	3	2	2	1
P3	2	2	2	1	1	1
P4	2	1	1	1	1	1
P5	3	3	3	3	3	3
P6	3	2	2	2	2	2
P7	1	1	1	2	2	2
P8	2	2	2	3	3	2

