



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 (Dairy Technology)

1	Having sufficient infrastructure in basic sciences and engineering subjects and ability to use the theoretical and applied info instantly in this field.
2	Determining the modern techniques, tools and information technologies required for applications related with his field and ability to use them efficiently
3	Ability for planning, projecting, and designing, following up, analyzing and finding target-driven solutions related with his field
4	Ability to have professional ethic and awareness.
5	Ability to work, decide, express opinions orally and in written individually
6	Ability to participate team studies, taking responsibility, making leadership.
7	Ability to conceive Atatürk's principles and reforms, to communicate in Turkish and foreign language.
8	Ability to comprehend the necessity to learn for a life time, to monitor developments in science and technology and continuously renew himself.
9	Having sufficient level of information about production and quality control of milk and dairy products and also product development, increasing product quality and food security fields.
10	Ability to detect, define, solve problems related with his field and to select and apply suitable methods and modeling techniques for this purpose.
11	To be conscious about workplace applications, worker health, work security and environment subjects, to have knowledge about legal results of the engineering applications related with his subject.

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

