

<b>COURSE DESCRIPTION</b>	
<b>Course code and title</b>	FİZ103,PHYSICS I
<b>Course Semester</b>	1
<b>Course Content</b>	Physics and Measurement, Motion in one dimension, Vectors , Move in two dimensions, Acts of Motion, Circular Motion and Newton's Laws, Work and Kinetic Energy, Potential energy and conservation of energy, Linear momentum and collisions, Rotation of rigid bodies around a fixed axis, Rolling Motion and Angular Momentum, Static Equilibrium and Flexibility, Vibration Motion and Gravity Law
<b>Recommended or Required Reading</b>	Fen ve Mühendislik için Fizik I, Editör: Kemal ÇOLAKOĞLU. - Physics For Scientists and Engineers with Modern Physics, R.Serway, Saunders College Publishing, 1990.
<b>Recommended or Required Reading</b>	
<b>Credits of Course (ECTS)</b>	6
<b>Prerequisites</b>	Lectures must be attended by students
<b>Type of Course</b>	Basic Science Education
<b>Language of Instruction</b>	English
<b>Purpose and Object of the Course</b>	Examination of basic mechanical phenomena in the nature and learning of basic concepts
<b>Learning Outcomes Of The Course Unit</b>	<ol style="list-style-type: none"> <li>1.The theoretical and practical applications of this course provide an understanding of the concepts and principles.</li> <li>2. Provides to develop the ability to establish a relationship between physics and the real world.</li> <li>3. Provides pre-skills for solving basic problems related to Mechanical Physics.</li> <li>4. Describes the application of the basic laws of physics to special engineering systems.</li> </ol>
<b>Planned Learning Activities and Teaching Methods</b>	Face to face
<b>Course Per Week</b>	<ol style="list-style-type: none"> <li>1.Week: Physics and Measurement</li> <li>2.Week: Motion in One Dimension</li> <li>3.Week: Vectors</li> <li>4.Week: Motion in two dimensions</li> <li>5.Week: Circular Motion and Newton's Laws</li> <li>6.Week: Work and Kinetic Energy</li> <li>7.Week: Potential energy and conservation of energy</li> <li>8.Week: Midterm Exam, Linear momentum and collisions</li> <li>9. Week: Linear momentum and collisions</li> <li>10.Week: Rotation of rigid bodies around a fixed axis</li> <li>11.Week: Rolling Motion and Angular Momentum</li> <li>12.Week: Static Equilibrium and Flexibility</li> <li>13.Week: Vibration Motion and Gravity Law</li> <li>14.Week: Vibration Motion and Gravity Law</li> <li>15.Week: Final</li> </ol>
<b>Workload</b>	Theoretical Study Hours of Course Per Week: 4hours Practising Hours of Course Per Week:0 Reading:2 hours Searching in Internet and Library:2 hours Designing and Applying Materials:0 Preparing Reports: 0 Preparing Presentation:0 Presentation:0 Mid-Term and Studying for Mid-Term: 10 hours Final and Studying for Final: 10 hours

<b>Assessment Methods And Criteria</b>		<b>Sayı</b>	<b>Toplam Katkısı (%)</b>						
	Mid-terms	1	40						
	Assignment	0							
	Exercise	0							
	Projects	0							
	Practice	0							
	Quiz	0							
	Contribution of In-term Studies to Overall Grade (%)								
	Contribution of Final Examination to Overall Grade (%)		60						
Attendance		0							
<b>Efficiency</b>	<b>Activities</b>		<b>Total number of weeks</b>	<b>Time (Weekly)</b>	<b>Total efficiency at the end of the semester</b>				
	Theoretical Study Hours of Course Per Week		14	4	56				
	Practicing Hours of Course Per Week		0	0	0				
	Reading		14	2	28				
	Searching in Internet and Library		14	2	28				
	Designing and Materials, Applying:		0	0	0				
	Preparing Reports		0	0	0				
	Preparing Presentation		0	0	0				
	Presentation		0	0	0				
	Mid-Term and Studying for Mid-Term		1	10	10				
	Final and Studying for Final		1	10	10				
	Other		5	2	10				
	TOTAL WORKLOAD				142				
	TOTAL WORKLOAD/ 25				5.68				
	ECTS of Course				6				
<b>Course's Contribution To Program</b>	No	PROGRAM LEARNING OUTCOMES	1	2	3	4	5		
	1	Adequate knowledge of subjects specific to mathematics, natural sciences and related engineering disciplines; ability to use theoretical and applied knowledge related to these areas in complex engineering problems.				x			
	2	Ability to identify, define, formulate, and solve complex engineering problems; ability to select and apply appropriate analysis and modeling methods to this end.				x			
	3	Ability to design a complex system, process, device or product under realistic	x						

	constraints and conditions to meet specific requirements; ability to apply modern design methods for this purpose.					
4	Ability to develop, select and use modern techniques and tools required for the analysis and solution of complex problems encountered in engineering practice; ability to use information technologies effectively.	x				
5	Ability to design and conduct experiments, collect data, analyze and interpret results to investigate complex engineering problems or discipline-specific research topics					
6	Ability to work effectively in disciplinary and multi-disciplinary teams; ability to work individually					
7	Ability to communicate effectively in Turkish, both orally and in writing; knowledge of at least one foreign language; the ability to write effective reports and understand written reports, to prepare design and production reports, to deliver effective presentations, to give and receive clear and understandable instructions.					
8	Awareness of the necessity of lifelong learning; the ability to access information, to follow developments in science and technology, and to renew oneself constantly					
9	Acting in accordance with ethical principles, professional and ethical responsibility; information about standards used in engineering applications.					
10	Information about business life practices such as project management, risk management and change management; awareness of entrepreneurship, innovation; information about sustainable development.					
11	Knowledge about the					

		universal and social effects of engineering applications on health, environment and safety and the problems of the age reflected in the engineering field; awareness of the legal consequences of engineering solutions.							
<b>Name of Lecturer(s) and E-mail(s) of Lecturer(s)</b>	Prof. Dr. Haluk KORALAY koralay@gazi.edu.tr								