


NEAR EAST UNIVERSITY – COMMON COURSES COORDINATION UNIT								
 Department of Common Courses Course Information Sheet & Course Outline 2020-2021 Spring Semester								
<b>Course Code</b> PHY101	<b>Course Name</b> General Physics I			<b>Credit</b> 4	<b>ECTS</b> 5			
<b>Pre-requisite:</b> -								
<b>Language:</b> English		<b>Course Type:</b> elective		<b>Year:</b> 2020-21		<b>Semester:</b> spring		
<b>Weekly Hours</b>	<b>Class Hours</b>		<b>Laboratory</b>	<b>Practicum</b>	<b>Learning Sessions</b>			
	3		2	-	<b>PS</b> 11	<b>C</b> 1	<b>R</b> 1	<b>T</b> 1
<b>Course Lecturer/Coordinator:</b> Dr Erkut Inanışeri / Assoc. Prof. Dr Gülsüm Aşıksoy <b>E-mail address</b> erkut.inaniseri@neu.edu.tr				Office Hours: Tuesday 10:00 – 10:50 Online Office Hour Link: <a href="https://meet.google.com/vck-sgzp-yti">meet.google.com/vck-sgzp-yti</a>				
<b>Learning Outcomes</b>	After the completion of this course, the student will be able to <ul style="list-style-type: none"> <li>Develop the knowledge of the concepts, theories, techniques and principles of classical mechanics</li> <li>Understand the diagrammatic and graphical representation of physics problems and physical data</li> <li>Improve their skills in correctly using symbols and units, analytically/critically applying the theoretical concepts and methods of mechanics and formulating appropriate equations to solve problems</li> <li>perform scripted experiments as a team, analyzing and evaluating the data, and writing lab reports</li> <li>Improve the strength of students' creative and systematic thinking capability</li> </ul>							
<b>Course Description</b>	This is an fundamental physics course for faculty of engineering. Its covers basic physics subjects of Mechanics							
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>To introduce the fundamental concepts of motion necessary for engineering science and provide essential background for engineering students.</li> <li>To provide students with a deeper understanding of fundamental laws and concepts of natural phenomena.</li> <li>To improve students' problem solving skills</li> </ul>							
<b>Textbooks and/or References</b>	1	Douglas C. Giancoli, Physics for Scientist and Engineers with Modern Physics, 4 <sup>th</sup> Edition, PrinticeHall.						
	2	Materials on UZEM						
<b>Course Content</b>	Physical quantities and units. Vector calculus. Kinematics of motion. Newton's laws of motion and their applications. Work-energy theorem. Impulse and momentum. Rotational kinematics and dynamics							
<b>Methods and Techniques Used in the Course</b>	Online education system							
WEEKLY OUTLINE								
Week	Date	Topic	Activities	Reference				
1	22February-26February	<b>Introduction to Classes</b>						
2	1 March- 5 March	Measurements, Estimating, Vectors		1				
3	8 March- 12 March	Kinematic in one dimension		1				
4	15 March -19 March	Kinematic in two or three dimension		1				
5	22 March - 26 March	Friction- circular motion		1				
6	29 March -2April	Work and Energy		1				
7	5 April -9 April	Work and Energy (Cont.)		1				
8	12 April- 16 April	Review midterm subjects		1				
9	19 April- 23 April	<b>Mid-term Exams</b>						
10	26 April- 30 April	Conservation of Energy		1				
11	3 May- 7 May	Linear Momentum		1				
12	10 May- 14 May	Rotational Motion		1				
13	17 May- 21 May	Angular Momentum		1				
14	24 May- 28 May	Angular Momentum (Cont.)		1				
15	31May- 4 June	Review all subjects						
16	7 june – 16 june	<b>Final Exams</b>						
<b>Attendance:</b> Minimum 70 %								
<b>Assessment Breakdown</b>	<b>Type</b>		<b>%</b>	<b>Reference/Source</b>	<b>Relevant Competencies</b>			
	1	Homeworks (3)	30	1				
	2	Quizzes (3)	60	1				
	3	Lab	10	1				
Learning Program								
Educational Tool	Amount	Student Work Load(Hours)	Educational Tool	Amount	Student Work Load(Hours)			
Preparing for lecture session	11	11*3=33	Lab session	5	5*3=15			
Home work	12	8*3=24	Discussion session	3	3*6=18			
Quizzes	3	3*10=30	Problem solving sessions	12	10*3=30			
				<b>Total</b>	150			
				<b>Recommended ECTS Credit (Total Hours / 30):</b>	<b>183/30 = ~5</b>			

