

NEAR EAST UNIVERSITY – COMMON COURSES COORDINATION UNIT



Ders Bilgi Formu / Course Information Sheet

Ders Kodu / Course Code PHY101	Ders Adı / Course Name General Physics I	Kredi /Credit 4	AKTS /ECTS 6					
Önkoşul / Pre-requisite: None								
Ders Dili / Language: English		Ders Türü /Course Type: Must	Öğretim Ortamı / Mode of Instruction: Online					
Haftalık Ders Saati / Weekly Hours	Sınıf Saati / Class Hours	Laboratuvar / Laboratory	Uygulama / Practicum	Öğretim Oturumları / Learning Sessions				
				PÇ / PS	P / C	D / R	Ö / T	
	3		2	-	0	0	0	1
Öğretim Çıktıları / Learning Outcomes		<p>Bu dersin sonunda öğrenciler: After the completion of this course, the student will be able to:</p> <ul style="list-style-type: none"> ▶ Develop the knowledge of the concepts, theories, techniques and principles of classical mechanics ▶ Understand the diagrammatic and graphical representation of physics problems and physical data ▶ 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 ▶ Improve their skills in applying the theoretical concepts and methods of physics and formulating appropriate equations to solve problems ▶ Improve the strength of students' creative and systematic thinking capability 						
Ders Tanımı / Course Description		This is an fundamental physics course for faculty of engineering. Its covers basic physics subjects of mechanics and electrostatics..						
Dersin Amaçları / Course Objectives		The objectives of this course are to provide the students with the fundamental principles of Mechanics to enable them to gain skills for problem solving and a scientific thinking, and to establish the foundations for further studies in engineering.						
Kullanılan Materyaller / Textbooks and/or References		1	Douglas C. Giancoli, Physics for Scientist and Engineers with Modern Physics, 4 th Edition, Printice Hall					
		2	Materials on UZEM					
Ders İçeriği / Course Content		<ol style="list-style-type: none"> 1. Units and Vectors 2. Kinematic in one dimension 3. Kinematic in two dimension 4. Dynamics (Newton's Laws) 5 Applications of Newton's Laws 6. Work and Energy 7. Conservation of Energy 8. Center of Mass and Linear Momentum 9. Conservation of Linear Momentum and Collisions 10. Rotational Motion 11. Angular Momentum 12. Conservation of Angular Momentum 						