NEAR EAST UNIVERSITY – FACULTY OF Pharmacy

Department of Pharmacy
Course Information Sheet& Course Outline

Course Code	Course Name	Credit	ECTS
PHY105	Physics	3	4

Pre-requisite: NO

Language: English	Course Type: must	Year: 1	Semester:1

Weekly Hours	Class Hours	Laboratory	Practicum	Learning Sessions			
				PS	C	R	T
	3	-	-	1	1	1	1

Course Lecturer/Coordinator:Dr Erkut İnan İşeri / Assoc. Prof. Dr. Gülsüm Aşıksoy

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Office Hours:Wednesday and Thursday 10:00

Online Office Hour Link:meet.google.com/zet-ptki-drc

Learning Outcomes	After the completion of this course the students, • 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 thermodynamics, fluid mechanics, radioactivity and formulating appropriate equations to solve problems • Improve the strength of students' creative and systematic thinking capability
Course Description	Measurement, vectors, kinematics, dynamics-Newton's laws, applications of Newton's laws, waves, fluid mechanics, thermodynamics, Optics action potential, radioactivity.
Course Objectives	The objectives of this course are to provide the students with the fundamental principles of Mechanics, Thermodynamics, Optics and Biophysics to enable them to gain skills for problem solving and a scientific thinking, and to establish the foundations for further studies in pharmacology.

Textbooks and/or References		
	1	Douglas C. Giancoli, Physics for Scientist and Engineers with Modern Physics, 4th Edition, Printice Hall
	2	J. Walker, D. Halliday, R. Resnick, "Principles of Physics", 10th Edition, Wiley
	3	R. A. Serway and R. J. Beichner , "Physics for Scientist and Engineers with Modern Physics", 8th Edition, Thomson Brooks/Cole
	4	

Course Content	
Methods and Techniques Used in the Course	Flippedlearning

WEEKLY OUTLINE

Week	Date	Topic	Reference
1	20 September –24 September	Units and Vectors	1
2	27 September – 1 October	Motion in one Dimension.	1
3	4 October–8 October	Motion in Two Dimension	1
4	11 October – 15 October	Newton's Laws and Applications of Newton's Laws	1
5	18 October – 22 October	Fluid Mechanics	1
6	25 October - 29 October	Fluid Mechanics	1
7	1 November - 5 November	Optics of the eye	1
8	8 November - 12 November	Temperature, Thermal Expansion and Ideal Gas	1
9	15 November - 19 November	**Midterm Exams**	
10	22 November - 26 November	Kinetic Theory of Gases, Heat and First law of Thermodynamics	1
11	29 November - 3 December	Electrostatic related to membrane potential and action Potential.	1
12	6 December - 10 December	Structure and Properties of Nucleus Binding energy	1
13	13 December - 17 December	Nuclear Forces, Radioactivity	1
14	20 December - 24 December	Alpha, Beta and Gamma Decay, Half Life	1
15	27 December - 31 December	Review	
16	3 January- 7 January	**Final Exams**	

Attendance:

Assessment Breakdown		Type	%	Reference/Source	Relevant Competencies
	1	Homeworks (4)	40	1	
	2	Quizzes (4)	60	1	

Learning Program					
Educational Tool	**Amount**	**Student Work Load(Hours)**	**Educational Tool**	**Amount**	**Student Work Load(Hours)**
Preparing for lecture session	11	22	Preparation for the quiz	11	22
Preparation for the homeworks	4	10	Consolidation session	3	9
Preparation for the quizzes	4	14	Discussion session	3	18
			Problem solving sessions	12	36
			Total	131	
		Recommended ECTS Credit (Total Hours / 30):	**131/30 = ~ 4**		