

FTR133 - Physics

Course Name	Code	Term	Theory (hours/week)	Application (hours/week)	Laboratory (hours/week)	ECTS
Physics	FTR 133	1.year/1.term Fall	2	-	-	4
Prerequisites						
Course language	Turkish					
Course type	Elective					
Learning and teaching strategies	Lecture Discussion					
Instructor (s)						
Course objective(Aim of course)	This course aims to teach students fundamentals of mechanics, electric, magnetism, motion and their laws.					
Learning outcomes	1. Explains and applies basic concepts such as measurement in physics, motion in one and two dimensions, linear momentum and collisions. 2. Explains the basic concepts and principles of physics 3. Explains and applies basic concepts such as Electric field in physics, Gauss's law, Electrical potential, Capacitance, Current and Resistance, Magnetic fields.					
References	1.Bekir Karaoğlu, Üniversiteler İçin Fizik 2.Kamil Temizyürek Genel Fizik I-II					

Course outline weekly:

Weeks	Topics
1. Week	Units and vectors
2. Week	One-dimensional motion, Planar movements
3. Week	Particle Dynamics, Laws of Motion
4. Week	Work and energy. Energy Conservation
5. Week	Conservation of linear momentum.
6. Week	Collision. Conservation of Momentum,
7. Week	Electric charge, Coulomb's Law
8. Week	Midterm Exam
9. Week	Electric Field, Electric Potential
10. Week	Capacitance and Dielectrics
11. Week	Current and resistance
12. Week	Direct Current Circuits
13. Week	Magnetic Fields
14. Week	An overview
15. Week	An overview

ECTS (Student Work Load Table)

Activities	Number	Duration	Total Work Load
Course Duration (X14)	14	2	28
Laboratory			
Practice			
Field Study			
Study Time Of Outside Of Class (Pre-Study, Practice, Etc.)	14	1	14
Presentations (Video shoot/Poster preparation/Oral presentation, Etc.)			
Seminars			
Project			
Case study			
Role playing, Dramatization			
Writing articles, Critique			
Time To Prepare For Midterm Exam	1	30	30
Final Exam Preparation Time	1	30	30
Total Work Load (hour) / 25(s)	102 / 25 = 4.08		
ECTS	4		

Evaluation System

Mid-Term Studies	Number	Contribution
Midterm exams	1	%100
Quiz		
Laboratory		
Practice		
Field Study		
Course Internship (If There Is)		
Homework's		
Presentation and Seminar		
Project		
Other evaluation methods		
Total Time To Activities For Midterm		100
Final works		
Final	1	%100
Homework		
Practice		
Laboratory		
Total Time To Activities For Midterm		100
Contribution Of Midterm Studies On Grades		%40
Contribution Of Final Exam On Grades		%60
Total		100

The relationship between learning outcomes and the program qualifications of the courses

Program Qualifications	Learning outcomes		
	L.O.1	L.O. 2	L.O.3
1-Acquire proficient infrastructure related to the field of Physiotherapy and Rehabilitation, gain the ability to use theoretical and practical knowledge and skills in this field.	4	4	4
2-Identify, define the factors affecting health and gain problem-solving skill by using the information they have; plan and implement a treatment and exercise program with appropriate evidence-based methods and new techniques.			
3-Gain the ability to use information technologies effectively, as well as the ability to select and use modern tools, techniques and agents necessary for physiotherapy and rehabilitation applications.	4	4	4
4-Design individual and multidisciplinary research, keep records, prepare reports, analyze and interpret results for quality service and research in health sciences.			
5-They conduct a literature search to access the information by using evidence-based databases and information sources.			
6-Gain autonomy in interdisciplinary and individual studies, ability to work effectively and take responsibility and awareness of the universal and social effects of their professional practice.			
7-Adopt life-long learning; contribute to quality improvement, field-related training and introductory programs and exhibit their professional behavior at national and international level.			
8-Have deontological and ethical awareness in professional researches and applications.			

Contribution to the level of proficiency: 1. Lowest, 2. Low / Medium, 3. Average, 4. High, 5. Excellent