

Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
FZK-3028	History of Physics	3.00	0.00	0.00	3.00	6.00
Course Detail						
Course Language	: Turkish					
Qualification Degree	: Bachelor					
Course Type	: Optional					
Preconditions	: Not					
Objectives of the Course	: To learn the developments and discovered laws of nature in a historical way					
Course Contents	: philosophical approaches of all civilizations to natural science from Antiquity to the present will be discussed. The discoveries of the great physicists who lived in these civilizations will be studied.					
Recommended or Required Reading	: 1) Colin A. Ronan, Science: Its History and Development Among the World's Cultures, Facts on File, 1983. 2) H. Floris Cohen, The Scientific Revolution: A Historiographical Inquiry, University of Chicago Press, 1994. 3) M. Serres (ed.), A History of Scientific Thought: Elements of a History of Science. Oxford: Blackwell,1995.					
Planned Learning Activities and Teaching Methods	: Oral lectures with interactive discussions, homeworks, applications and practice.					
Recommended Optional Programme Components	: -					
Instructors	: Dr. Öğr. Üyesi Oktay Yılmaz					
Instructor's Assistants	: -					
Presentation Of Course	: Face to face					

Course Outcomes

Upon the completion of this course a student :

- 1 İlk Çağlardaki bilimi öğrenir
- 2 Orta Çağlardaki bilimi öğrenir
- 3 17-20. Yüzyıllar arasındaki bilimi öğrenir
- 4 Klasik fiziği tarihsel gelişimi ile öğrenir
- 5 Modern ve Kuantum fiziğinin ortaya çıkışını öğrenir

Preconditions

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Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods
1.Week	*Introduction to the history of physics				
2.Week	*Science in Ancient Greek World				
3.Week	*Science in Medieval Christian World				
4.Week	*Science in Islamic World				
5.Week	*Turkish Scientists in the Middle Ages				
6.Week	*Science During the Renaissance				
7.Week	*Science During the Renaissance				
8.Week	*Science in the 17th century				
9.Week	*Science in the 18th century				
10.Week	*Science in the 19th century				
11.Week	*Science in the 20th century				
12.Week	*Modern Physics				
13.Week	*Modern Physics				
14.Week	*Republic of Turkey and Turkish Scientists				

Assesment Methods %

2 Final : 60.000

3 Vize : 40.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload
Vize	1	3.00	3.00
Final	1	3.00	3.00

Activities	Count	Time(Hour)	Sum of Workload
Preparation for midterm	7	3.00	21.00
Homework	14	3.00	42.00
Make-up	1	3.00	3.00
Problem Çözme	14	1.00	14.00
Application/Practice	14	1.00	14.00
Class Hours (14 weeks)	14	3.00	42.00
Presentation/Seminar	2	2.00	4.00
Final Exam Preparation	7	3.00	21.00
Preliminary Study	14	1.00	14.00
			Total : 181.00
			Sum of Workload / 30 (Hour) : 6
			ECTS : 6.00

Program And OutcomeRelation																									
	P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14	P.O. 15	P.O. 16	P.O. 17	P.O. 18	P.O. 19	P.O. 20	P.O. 21	P.O. 22	P.O. 23	P.O. 24	
L.O. 1	3	1	4	3	5	5	4	3	3	4	3	4	3	3	4	2	3	3	2	3	4	4	3	3	
L.O. 2	3	2	3	2	4	4	2	3	3	2	2	3	4	3	3	2	3	2	4	3	2	3	2	3	
L.O. 3	4	3	3	3	3	3	3	3	4	3	3	3	4	3	3	3	2	3	3	2	4	4	2	4	
L.O. 4	2	4	3	4	4	4	2	3	3	3	3	5	1	2	2	3	3	4	2	3	2	3	2	3	
L.O. 5	3	5	4	3	4	3	3	3	3	3	4	3	4	3	4	3	3	3	4	4	4	2	3	2	4

Ders/Program Çıktıları İlişkisi																								
P.O. 1	P.O. 2	P.O. 3	P.O. 4	P.O. 5	P.O. 6	P.O. 7	P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	P.O. 13	P.O. 14	P.O. 15	P.O. 16	P.O. 17	P.O. 18	P.O. 19	P.O. 20	P.O. 21	P.O. 22	P.O. 23	P.O. 24	P.O. 2
3	4	5	2	3	3	3	4	1	4	4	3	2	2	3	3	4	4	1	3	2	2	1	1	3