Fizik Bölümü / PHYSICS /

Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS
FZK-1007	Technology and R&G Management in Physics	2.00	0.00	0.00	2.00	2.00

Course Detail

Course Language	:	Turkish
Qualification Degree	:	Bachelor
Course Type	:	Compulsory
Preconditions	:	Not
Objectives of the Course	:	The aim of this course is; to gain skills to use the acquired knowledge of physics in the context of technology and R&D studies.
Course Contents	:	Concepts related to science, technology and R&D, applications of physics in technology, R&D studies in physics, place and importance of physics in R&D studies, applications of physics in R&D and technology with examples.
Recommended or Required Reading	:	1- Fiziğin Teknolojideki Uygulamaları, Karamustafaoğlu, O., Çelik, H., 2019, Pegem Akademi, Ankara. 2- Fizik: Teknolojinin Bilimsel İlkeleri, Sarı, İ., Büyüktaş, K., 2012, Seçkin Yayınevi.
Planned Learning Activities and Teaching Methods	:	Sözlü sunum, uygulama, ödev, tartışma.
Recommended Optional Programme Components	:	To research and examine the applications of physics in technology and examples in R&D studies.
Course Instructors	:	Prof. Dr. İsmail Tarhan
Instructor's Assistants	:	None
Presentation Of Course	:	Face to face

Course Outcomes

Upon the completion of this course a student :

1 Learns about technology and R&D studies.

2 Gains information about the place and importance of physics in technology.

3 Gains the ability to use physics knowledge in R&D studies.

4 He/She takes part in R&D and technology studies related to physics.

5 He/She wins the technology and R&D culture.

Preconditions

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Weekly Contents

	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods
1.Week	*Concepts related to Physics, Science, technology and R&D.				
2.Week	*Concepts related to Physics, Science, technology and R&D.				
3.Week	*Concepts related to Physics, Science, technology and R&D.				
4.Week	*Applications of physics in technology.				
5.Week	*Applications of physics in technology.				
6.Week	*Applications of physics in technology.				
7.Week	*Applications of physics in technology.				
8.Week	*Case studies on the application and importance of Physics in R&D studies.				
9.Week	*Case studies on the application and importance of Physics in R&D studies.				
10.Week	*Case studies on the application and importance of Physics in R&D studies.				
11.Week	*Case studies on the application and importance of Physics in R&D studies.				
12.Week	*Individual studies on technology and R&D applications of physics.				
13.Week	*Individual studies on technology and R&D applications of physics.				
14.Week	*Individual studies on technology and R&D applications of physics.				

Assesment Methods %

1 Mid Term Exam 1 : 40.000

2 Final : 60.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload
Vize	1	2.00	2.00
Final	1	4.00	4.00
Individual study before lecture	14	2.00	28.00
Individual study after Application / Practice	1	10.00	10.00
Presentation/Seminar	1	1.00	1.00
Ödev	1	8.00	8.00
		Total :	53.00
		Sum of Workload / 30 (Hour) :	2
		ECTS :	2.00

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	2	3	2	3	3	3	2	2	3	2	3	4	3	3	4	3	2	2	3	4	4	4	3
L.O. 2	3	3	3	2	3	4	3	3	2	3	4	4	3	3	3	4	3	2	3	2	4	4	4	4
L.O. 3	4	2	4	3	4	4	3	3	4	2	4	2	3	3	3	4	3	3	3	2	4	3	3	4
L.O. 4	4	4	3	3	3	4	3	4	4	4	4	3	4	3	3	4	4	3	4	3	4	3	3	3
L.O. 5	4	4	4	3	3	4	4	5	4	5	5	5	4	4	4	3	3	4	4	3	4	5	5	5

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
4	3	3	3	3	4	3	3	3	3	4	3	4	3	3	4	3	3	3	3	4	4	4	4	4