Fizik Bölümü / PHYSICS /

Fizik Bolumu / PHYSICS /														
Course Code	Course Name	Teorical	Practice	Laboratory	Credits	ECTS								
FZK-3033	New Product Design and Development	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	: The main purpose of this course is; The product concept, varieties, design and methods are to create awareness of product development paths and importance and place mixtures.													
Course Contents	: Concept and importance of product, design techniques and some applications, product development.	oncept and importance of product, design techniques and some applications, product development and techniques, importance and possible effects of roduct development.												
Recommended or Require Reading	Required : 1- Ürün Geliştirme, Kurtoğlu, A., 2017, Seçkin Yayıncılık. 2- Başarılı ve Rekabetçi Yeni Ürünler Tasarlama ve Geliştirme, Yayla, P., 2018 Endüstriyel Tasarım, Yazıcıoğlu, Y., 2018, İdeal Kültür Yayıncılık.													
Planned Learning Activitie Teaching Methods	es and : Oral presentation, homework, written exam, discussion.													
Recommended Optional Programme Components	: Reading, researching and presenting documents related to the course subject.													
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 Have knowledge about the concept and importance of the product.														
2 Explains product design and me	thods.													
3 Knows product development techniques.														
4 Applies product design techniqu	es and product development methods.													

Preconditions

Course Code

Course Name

Laboratory Credits ECTS

Teorical

Practice

Weekly C	Weekiy Contents													
	Teorical	Practice	Laboratory	Preparation Info	Teaching Methods									
1.Week	*Product concept, product types and basic concepts.													
2.Week	*New and successful product development methodologies.													
3.Week	*New and successful product development methodologies.													
4.Week	*Importance of product design and product development.													
5.Week	*Importance of product design and product development.													
6.Week	*New product development and product improvement using new product development methodologies.													
7.Week	*New product development and product improvement using new product development methodologies.													
8.Week	*New product development and product improvement using new product development methodologies.													
9.Week	*Fundamentals and objectives of product design, product development, and product improvement.													
10.Week	*Fundamentals and objectives of product design, product development, and product improvement.													
11.Week	*Some computer applications in product design, development and product improvement.													
12.Week	*Some computer applications in product design, development and product improvement.													
13.Week	*Some virtual product design, development and improvement practices.													
14.Week	*Some virtual product design, development and improvement practices.													

Assesment Methods %

1 Mid Term Exam 1 : 40.000

2 Final : 60.000

ECTS Workload

Activities	Count	Time(Hour)	Sum of Workload					
Vize	1	3.00	3.00					
Final	1	3.00	3.00					
Individual study before lecture	14	3.00	42.00					
Individual study after lecture	1	3.00	3.00					
Preparation for midterm	1	10.00	10.00					
Preparation for final	1	20.00	20.00					
Homework	4	20.00	80.00					
Presentation/Seminar	1	1.00	1.00					
Preliminary Study	1	6.00	6.00					
	Total : 168.00							
	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	2	2	3	3	3	3	3	4	4	5	4	4	3	4	4	5	5	3	3	3	2	2	3	4
L.O. 2	2	3	3	4	3	4	4	4	5	5	3	4	3	4	5	4	5	3	3	4	3	2	4	4
L.O. 3	3	3	4	4	4	4	5	5	4	4	4	4	4	3	4	4	3	4	4	4	3	3	4	4
L.O. 4	3	4	4	4	4	4	5	5	5	5	5	4	4	4	5	5	3	4	3	4	4	4	5	4
4																								•

Der	s/Prograr	n Çıktılar	ı İlişkisi																					
P.O.	1 P.O. 2	2 P.O. 3	P.O. 4	P.O. 5	P.O. 6	6 <b>P.O</b> . 7	7 P.O. 8	P.O. 9	P.O. 10	P.O. 11	P.O. 12	2 P.O. 13	3 P.O. 14	4 P.O. 15	P.O. 16	P.O. 17	P.O. 18	P.O. 1	9 P.O. 20	P.O. 21	P.O. 22	P.O. 23	P.O. 24	P.O. 2
3	3	4	4	4	4	4	5	5	5	4	4	4	4	5	5	4	4	3	4	3	3	4	4	5
4																								•