

| Course Code | Course Name | Teorical | Practice | Laboratory | Credits | ECTS |
|---|--|----------|----------|------------|---------|------|
| FZK-2018 | Physics and Technology | 2.00 | 0.00 | 0.00 | 2.00 | 2.00 |
| Course Detail | | | | | | |
| Course Language | : Turkish | | | | | |
| Qualification Degree | : Bachelor | | | | | |
| Course Type | : Optional | | | | | |
| Preconditions | : Not | | | | | |
| Objectives of the Course | : The aim of this course is to examine the applications of the acquired physics knowledge in technology with examples. | | | | | |
| Course Contents | : Physics, science and technology related concepts and their importance. Examination of the place, use and effect of physics in particular and science in general with examples. | | | | | |
| Recommended or Required Reading | : 1- Fiziğin Bilim ve Teknolojideki Uygulamaları, Yener , D., 2019, Pegem Akademi Yayıncılık. 2- Genel Fizik ve Teknolojinin Bilimsel İlkeleri, Kara, M. (Ed.Orbay, M., Öner), F., 2018, Pegem Akademi Yayıncılık. | | | | | |
| Planned Learning Activities and Teaching Methods | : Oral presentation, practice, homework, discussion. | | | | | |
| Recommended Optional Programme Components | : Researching and examining documents related to physics, technology and the applications of physics in technology. | | | | | |
| 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 physics, science and technology.
- 2 Makes explanations about the applications of physics in technology.
- 3 Conducts studies on the applications of physics in technology.
- 4 He/She takes part in studies on the applications of physics.

Preconditions

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| Weekly Contents | | | | | |
|-----------------|---|----------|------------|------------------|------------------|
| | Teorical | Practice | Laboratory | Preparation Info | Teaching Methods |
| 1.Week | *Fundamental concepts of physics and technology. | | | | |
| 2.Week | *Fundamental concepts of physics and technology. | | | | |
| 3.Week | *Fundamental concepts of physics and technology. | | | | |
| 4.Week | *Fundamental concepts of physics and technology. | | | | |
| 5.Week | *Application Examples in Physics and Technology | | | | |
| 6.Week | *Application Examples in Physics and Technology | | | | |
| 7.Week | *Application Examples in Physics and Technology | | | | |
| 8.Week | *Application Examples in Physics and Technology | | | | |
| 9.Week | *Application Examples in Physics and Technology | | | | |
| 10.Week | *Application Examples in Physics and Technology | | | | |
| 11.Week | *Examining, analyzing, scrutinizing and weighing different aspects of physics and technological applications. | | | | |
| 12.Week | *Examining, analyzing, scrutinizing and weighing different aspects of physics and technological applications. | | | | |
| 13.Week | *Examining, analyzing, scrutinizing and weighing different aspects of physics and technological applications. | | | | |
| 14.Week | *Examining, analyzing, scrutinizing and weighing different aspects of physics and technological applications. | | | | |

| Assesment Methods % |
|---------------------------|
| 1 Md Term Exam 1 : 40.000 |
| 2 Final : 0.000 |

| ECTS Workload | | | |
|---------------------------------|-------|------------|-----------------|
| Activities | Count | Time(Hour) | Sum of Workload |
| Vize | 1 | 2.00 | 2.00 |
| Final | 1 | 2.00 | 2.00 |
| Individual study before lecture | 14 | 2.00 | 28.00 |
| Individual study after lecture | 14 | 2.00 | 28.00 |
| Total : | | | 60.00 |
| 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 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 5 | 4 | 5 | 4 |
| L.O. 2 | 4 | 4 | 3 | 5 | 4 | 4 | 3 | 2 | 2 | 4 | 3 | 4 | 5 | 3 | 4 | 4 | 4 | 3 | 5 | 4 | 4 | 3 | 2 | 2 |
| L.O. 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 |
| L.O. 4 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 3 | 5 | 5 | 5 | 4 | 4 | 3 | 3 | 4 | 5 | 4 | 4 | 5 | 5 | 4 | 4 | 5 |

| Ders/Program Çıktıları İlişkisi | | | | | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
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| 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 |