

**İSTANBUL TEKNİK ÜNİVERSİTESİ**  
**Fen Edebiyat Fakültesi - Fizik Bölümü**

<b>Course</b>	:	<b>FIZ 426E - Optoelectronics</b>
<b>Semester</b>	:	2020-2021 Spring
<b>Course web address</b>	:	http://www.ninova.itu.edu.tr
<b>Lecturer</b>	:	Ali Gelir
<b>Contact</b>	:	<a href="http://www.akademi.itu.edu.tr/gelira">www.akademi.itu.edu.tr/gelira</a> gelira@itu.edu.tr (0212) 285 7244
<b>Weekly program</b>	:	Wednesday: 12: <sup>30</sup> - 15: <sup>30</sup>
<b>Office Hours</b>	:	Wednesday 16 <sup>00</sup> - 17: <sup>30</sup>

**Textbook:**

1. Optoelectronics and Photonics, S.O. Kasap, Pearson, 2013.
2. Optoelectronics, Endel Uiga, Prentice Hall Int. Ed., 1995.

**Other References:**

1. Optoelectronics : an introduction to materials and devices, Jasprit Singh, New York : McGraw-Hill, c1996.
2. Optoelektronik / J. Wilson, J.F.B. Hawkes ; çev. İbrahim Okur, Değişim Yayınları, 2000
3. Optoelektronik : teori ve uygulamalar / Eldar Musa, Nobel, 2008

**Course Plan**

1. Review of Optics
2. Review of Optics
3. Review of Semiconductors
4. Review of Semiconductors
5. Radiation Sources
6. Radiation Sources
7. Lasers
8. Lasers
9. Displays
10. Photodetectors
11. Photodetectors and Optocouplers
12. Fiber Optics
13. Fiber Optics
14. Fiber Optics

**Quizzes:** minimum 5 quizzes

**Exams**

**Midterm I:** April 01, 2021

**Midterm II:** May, 06, 2021

**Final:** will be announced

**Grading:**

Quizzes:%30

Midterms:%30

Final:%40

You must get minimum 25 points over 60 during the term to be able to take the Final Exam.