İSTANBUL TEKNİK ÜNİVERSİTESİ
Fen Edebiyat Fakültesi - Fizik Bölümü

Course Code and Name – CRN	**:**	**FIZ 426E – Optoelectronics 20320**
Semester	**:**	2019-2020 Spring
Course web address	**:**	http://www.ninova.itu.edu.tr
Lecturer	**:**	Ali Gelir
Contact	**:**	www.akademi.itu.edu.tr/gelira gelira@ itu.edu.tr (0212) 285 7244
Weekly program	**:**	Wednesday: 12:30 - 15:30 (D104)
Office Hours	**:**	Tuesday 08:30 - 11:30

Textbook:

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

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 7 quizzes
Homework: minimum 7 homeworks

Exams
Midterm I: March 11, 2020
Midterm II: Apr. 22, 2020
Final: will be announced

Grading:
Quizzes:%15
Homeworks: %5
Project: %10
Midterms:%30
Final:%40

Attendance: 70 % of lecture hours will be required.
Criteria for taking the final exam: Minimum number of quizzes must be taken is 5 and the minimum grade is 25 over 60. Students who do not meet these criteria cannot take the final exam.