

FIZ 313E Modern Physics

Semester: Spring 2019-2020

Instructor: Prof. Dr. H. Özgür Özer

Faculty of Science and Letters, Dept. of Physics Engineering, Office: B4-Z11

Ph: 212 2857222 e-mail: oozer@itu.edu.tr

Course schedule: Mon 08:30-10:30, Wed 08:30-10:30, Fri 08:30-09:30.

Course website: <https://ninova.itu.edu.tr/Ders/12386>

Text book and other references:

1. Concepts of Modern Physics, A. Baiser, 6th ed., McGraw-Hill (2003).
2. Modern Physics, John Taylor, Chris Zafaritos, Prentice Hall (1991).
3. Modern Physics, Kenneth Krane.

Course outline:

Subject
Special Theory of Relativity
Wave-particle duality
Atoms
Schrödinger equation
Hydrogen atom
Many electron systems
Introduction to Statistical Physics
Introduction to Solid State Physics

Grading:

1st Midterm	20%
2nd Midterm	20%
Final	40%
Quizzes	16%
Homeworks	4 %

%70 attendance is obligatory according to the university's regulations. Additional criteria to be able to attend the final exam (i.e. not to get VF) is to collect 20 points out of 60 before the final exam.