



T.C.
İSTANBUL TEKNİK ÜNİVERSİTESİ
FEN EDEBİYAT FAKÜLTESİ
FİZİK MÜHENDİSLİĞİ BÖLÜMÜ
MASLAK 34469 İSTANBUL



PHYSICS 102E – 2021/2022 Summer

Textbook:

H. D. Young and R. A. Freedman, University Physics with Modern Physics 12th/14th Ed. Pearson (2008/2016).

Supplementary text:

- D. C. Giancoli, Fen Bilimcileri ve Mühendislik için Fizik (Dördüncü Baskıdan Çeviri), Akademi (2009).
- D. Halliday, R. Resnick & J. Walker, Fundamentals of Physics (8th Ed.), John Wiley (2008).
- R. A. Serway & J. W. Jewett, Physics for Scientists and Engineers (7th Ed.), Brooks Cole (2007).

Week	Date	Chapter	Topics
1	04.07.2022	21	Electric Charge and Electric Field (21.1 – 21.7)
		22	Gauss's Law (22.1 – 22.5)
2	18.07.2022	23	Electric Potential (23.1 – 23.5)
		24	Capacitance and Dielectrics (24.1 – 24.4)
3	25.07.2022	25-26	Current, Resistance and Electromotive force (25.1 – 25.5) Direct-Current Circuits (26.1 – 26.5)
		27	Magnetic Field and Magnetic Forces (27.1 – 27.7)
4	01.08.2022	28	Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7)
		29	Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7)
5	08.08.2022	30	Inductance – Inductors (30.1 – 30.6)
		32	Electromagnetic Waves (32.1 – 32.5)

Exams:

Midterm : 3 August, 2022, 18:00-20:00 - covers Chapter 21 - Chapter 26 (inclusive).

Final Exam : Between 13 – 21 August, 2022 (the exact date and time will be announced by the Student Administration Office), covers all chapters.

Letter Grade Weights:

Midterm : 50%

Final : 50%

In-term requirements:

You must get 25% of the credit from the in-term assessments, otherwise you will not be able to attend the final exam and fail the course with a VF grade. For this term this pass condition corresponds to 12.5/50 points from the midterm examination.

Attendance:

You have to attend at least 70% of the lectures by university rules.

(See <https://www.sis.itu.edu.tr/TR/mevzuat/lisans-yonetmelik.php>; Madde 23-(1).)

Follow all the announcements on the [Physics Eng. Dept. web page](#) and [Ninova course page](#) regarding FIZ102E.