



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



PHYSICS 102E – 2023/2024 Spring

TEXTBOOK:

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

SUPPLEMENTARY TEXT:

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

Week	Date	Chapter	Topics
1	12 February 2024	Chapter 21	Electric Charge and Electric Field (21.1 – 21.7)
2	19 February 2024	Chapter 22	Gauss's Law (22.1 – 22.5)
3	26 February 2024	Chapter 22	Gauss's Law (22.1 – 22.5)
4	4 March 2024	Chapter 23	Electric Potential (23.1 – 23.5)
5	11 March 2024	Chapter 24	Capacitance and Dielectrics (24.1 – 24.4)
6	18 March 2024	Chapter 25	Current, Resistance and Electromotive force (25.1 – 25.5)
7	25 March 2024	Chapter 26	Direct-Current Circuits (26.1 – 26.5)
8	1 April 2024	Chapter 27	Magnetic Field and Magnetic Forces (27.1 – 27.7)
	8 April 2024		Semester Break
9	15 April 2024	Chapter 28	Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7)
10	22 April 2024	Chapter 28	Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7)
11	29 April 2024	Chapter 29	Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7)
12	6 May 2024	Chapter 30	Inductance – Inductors (30.1 – 30.6)
13	13 May 2024	Chapter 32	Electromagnetic Waves (32.1 – 32.5)
14	20 May 2024	Chapter 32	Electromagnetic Waves (32.1 – 32.5)

Exams:

Midterm I: 2024 Saturday, 10:00 – 12:00. Topics: Chapter 21 – Chapter 24

Midterm II: 2024 Saturday, 10:00 – 12:00. Topics: Chapter 21 – Chapter 28

Final Exam: (Exact date and time will be announced by the Student Administration Office. Includes all chapters).

Letter Grade Weights: Midterm I : 30%, Midterm II : 30%, Final Exam : 40%

Remarks

- The exams will consist of multiple-choice questions. Exam grades will be calculated by subtracting one quarter of the number of wrong answers from the number of correct answers. If the resulting grade is negative, the grade will be considered as zero.
- Students, who do not attend at least one of the in-term exams, are not admitted to the final exam and get VF.
- Letter grades are assigned in accordance with the guidelines set by the Senate.
- All course announcements and materials will be posted on both <https://fizik.itu.edu.tr> and the 'ninoval' system. It is the responsibility of students to regularly check these websites for updates.