



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



PHYSICS 102E – 2022/2023 Spring

TEXTBOOK:

H. D. Young and R. A. Freedman, University Physics 12th-14th Ed. Pearson (2008, 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	6 February 2023	Chapter 21	Electric Charge and Electric Field (21.1 – 21.7)
2	13 February 2023	Chapter 22	Gauss's Law (22.1 – 22.5)
3	20 February 2023	Chapter 23	Electric Potential (23.1 – 23.5)
4	27 February 2023	Chapter 24	Capacitance and Dielectrics (24.1 – 24.4)
5	6 March 2023	Chapter 25	Current, Resistance and Electromotive force (25.1 – 25.5)
6	13 March 2023	Chapter 26	Direct-Current Circuits (26.1 – 26.5)
7	20 March 2023	Chapter 27	Magnetic Field and Magnetic Forces (27.1 – 27.7)
	27 March 2023		Spring Break
8	3 April 2023	Chapter 28	Sources of Magnetic Field - Biot Savart&Ampere's laws (28.1 – 28.7)
9	10 April 2023	Chapter 28	Sources of Magnetic Field - Biot Savart&Ampere's laws (28.1 – 28.7)
10	17 April 2023	Chapter 29	Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7)
11	24 April 2023	Chapter 29	Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7)
12	1 May 2023	Chapter 30	Inductance – Inductors (30.1 – 30.6)
13	8 May 2023	Chapter 32	Electromagnetic Waves (32.1 – 32.5)
14	15 May 2023	Chapter 32	Electromagnetic Waves (32.1 – 32.5)

Exams:

1st Midterm : TBA

2nd Midterm : TBA

Final Exam : 22 May – 4 June, 2023 (Exact date and time will be announced by the Student Administration Office.)
(Includes all chapters).

Letter Grade Weights: Midterm 1 : 30% Midterm 2 : 30% Final : 40 %

Attendance requirement: Attendance to 70% of classes is obligatory.

Remarks

- The exams will be multiple choice. Exam grades will be calculated by subtracting one quarter of the number of wrong answers from the number of correct answers. If the exam grade is negative, the grade will be considered as zero.
- Students failing to score at least 25 % (i.e. 15 out of 60) on the in-term assessments (Midterm 1 and Midterm 2) will not be allowed to attend the final exam and will be graded VF (no visa for final).
- *Minimum passing grade:* A minimum of 40.00/100.00 is required for a passing letter grade.
- Check the Physics Eng. Dep. webpage regularly and before exams for announcements regarding the course.