



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



PHYSICS 102E – 2020/2021 Fall

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 | 19 October 2020 | Chapter 21 | Electric Charge and Electric Field (21.1 – 21.7) |
| 2 | 26 October 2020 | Chapter 22 | Gauss's Law (22.1 – 22.5) |
| 3 | 2 November 2020 | Chapter 22 | Gauss's Law (22.1 – 22.5) |
| 4 | 9 November 2020 | Chapter 23 | Electric Potential (23.1 – 23.5) |
| 5 | 16 November 2020 | Chapter 24 | Capacitance and Dielectrics (24.1 – 24.4) |
| 6 | 23 November 2020 | Chapter 25 | Current, Resistance and Electromotive force (25.1 – 25.5) |
| 7 | 30 November 2020 | Chapter 26 | Direct-Current Circuits (26.1 – 26.5) |
| 8 | 7 December 2020 | Chapter 27 | Magnetic Field and Magnetic Forces (27.1 – 27.7) |
| 9 | 14 December 2020 | Chapter 28 | Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7) |
| 10 | 21 December 2020 | Chapter 28 | Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7) |
| 11 | 28 December 2020 | Chapter 29 | Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7) |
| 12 | 4 January 2021 | Chapter 30 | Inductance – Inductors (30.1 – 30.6) |
| 13 | 11 January 2021 | Chapter 32 | Electromagnetic Waves (32.1 – 32.5) |
| 14 | 18 January 2021 | Chapter 32 | Electromagnetic Waves (32.1 – 32.5) |

Exams:

Midterm : December 19, 2020 (Includes Chapter)

Final Exam : January 25 – February 7, 2021 (Exact date and time will be announced by the Student Administration Office.) (Includes all chapters).

Letter Grade Weights:

- Midterm : 40 %
Homework : 20 % (5 Homework x 4%)
Final : 40 %

Attention:

In order to take the final exam, you have to take at least the total 18.0 % over 60.0 % from the midterm and homework's.

Please keep track of the webpage of Physics Eng. Dept, not to miss any announcements!