



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



## PHYSICS 102E – 2017/2018 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	11 September 2017	Chapter 21	Electric Charge and Electric Field (21.1 – 21.7)
2	18 September 2017	Chapter 22	Gauss's Law (22.1 – 22.5)
3	25 September 2017	Chapter 22	Gauss's Law (22.1 – 22.5)
4	2 October 2017	Chapter 23	Electric Potential (23.1 – 23.5)
5	9 October 2017	Chapter 24	Capacitance and Dielectrics (24.1 – 24.4)
6	16 October 2017	Chapter 25	Current, Resistance and Electromotive force (25.1 – 25.5)
7	23 October 2017	Chapter 26	Direct-Current Circuits (26.1 – 26.5)
30 October 2017			Semester Break
8	6 November 2017	Chapter 27	Magnetic Field and Magnetic Forces (27.1 – 27.7)
9	13 November 2017	Chapter 28	Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7)
10	20 November 2017	Chapter 28	Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7)
11	27 November 2017	Chapter 29	Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7)
12	4 December 2017	Chapter 30	Inductance – Inductors (30.1 – 30.6)
13	11 December 2017	Chapter 32	Electromagnetic Waves (32.1 – 32.5)
14	18 December 2017	Chapter 32	Electromagnetic Waves (32.1 – 32.5)

### Exams:

1<sup>st</sup> Midterm : October 21, 2017 (Includes Chapter 21, 22, 23, 24)

2<sup>nd</sup> Midterm : December 9, 2017 (Includes Chapter 25, 26, 27, 28, 29)

Final Exam : January 3-12, 2018. Exact date and time will be announced by the Student Administration Office (Includes all Chapters).

### Letter Grade Weights:

1<sup>st</sup> Midterm : 30 %

2<sup>nd</sup> Midterm : 30 %

Final : 40 %

### Attendance:

You have to attend at least 70% of the lectures. This is not the requirement of Physics Department but our University.<sup>1</sup> In addition, in order to take the final exam, you have to take at least the total 15.0 points over 60.0 from the midterms.

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