



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

## PHYSICS 102E – 2016/2017 SPRING

### TEXTBOOK:

University Physics, Young & Freedman (12<sup>th</sup> Ed.) Pearson/Addison Wesley

### SUPPLEMENTARY TEXT:

1. Physics , Gettys Keller and Skove, McGraw-Hill
2. Fundamentals of Physics, Halliday, Resnick and Walker, Wiley
3. Temel Fizik Cilt 1, PM Fishbane, S Gasiorowicz, ST Thornton, Arkadaş Yayıncılık

Week	Date	Chapter	Topics
1	6 February 2017	Chapter 21	Electric Charge and Electric Field (21.1 – 21.7)
2	13 February 2017	Chapter 22	Gauss's Law (22.1 – 22.5)
3	20 February 2017	Chapter 23	Electric Potential (23.1 – 23.5)
4	27 February 2017	Chapter 24	Capacitance and Dielectrics (24.1 – 24.4)
5	6 March 2017	Chapter 25	Current, Resistance and Electromotive force (25.1 – 25.5)
6	13 March 2017	Chapter 26	Direct-Current Circuits (26.1 – 26.5)
7	20 March 2017		Review and Problem Solution Session
	27 March 2017		Semester Break
8	3 April 2017	Chapter 27	Magnetic Field and Magnetic Forces (27.1 – 27.7)
9	10 April 2017	Chapter 28	Sources of Magnetic Field - Biot Savart & Ampere's laws (28.1 – 28.7)
10	17 April 2017	Chapter 29	Electromagnetic Induction - Faraday's law (29.1 – 29.5, 29.7)
11	24 April 2017	Chapter 30	Inductance – Inductors (30.1 – 30.6)
12	1 May 2017	Chapter 32	Electromagnetic Waves (32.1 – 32.5)
13	8 May 2017	Chapter 32	Electromagnetic Waves (32.1 – 32.5)
14	15 May 2017		Review and Problem Solution Session

**Homework:** There will be online homework sets posted on the webpage of Physics Department ([www.fizikodev.itu.edu.tr](http://www.fizikodev.itu.edu.tr)).

**Exams:** In each exam four or five test question will be adapted from an assigned homework problem

1<sup>st</sup> Midterm : March 25, 2017 (Includes Chapter 21, 22, 23, 24)

2<sup>nd</sup> Midterm : May.6, 2017 (Includes Chapter 25, 26, 27, 28)

Final Exam : May 29 – June 9, 2017. Exact date and time will be announced by the Student Administration Office (Includes all Chapters plus 29, 30, 32)).

### Letter Grade Weights:

Homework : 10 %

1<sup>st</sup> Midterm : 25 %

2<sup>nd</sup> Midterm : 25 %

Final : 40 %

### Attendance:

The minimum passing grade will be 50% of the overall grade.