



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

## PHYSICS I - PHY123 – 2017/2018 Fall

### TEXTBOOK:

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

### 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	14 September 2016	Chapter 1	Units, Physical Quantities, and Vectors
2	21 September 2016	Chapter 2 and 3	Kinematics
3	28 September 2016	Chapter 4	Newton's Laws of Motion
4	5 October 2016	Chapter 5	Applying Newton's Laws
5	12 October 2016	Chapter 6	Work and Kinetic Energy
6	19 October 2016	Chapter 7	Potential Energy and Energy Conservation
7	26 October 2016	Chapter 8	Momentum, Impulse, and Collisions
	30 October 2017		Semester Break
8	9 November 2016	Chapter 8	Momentum, Impulse, and Collisions
9	16 November 2016	Chapter 9	Kinematics of Rotational Motion
10	23 November 2016	Chapter 10	Dynamics of Rotational Motion
11	30 November 2016	Chapter 10	Dynamics of Rotational Motion
12	7 December 2016	Chapter 12	Gravitation
13	14 December 2016	Chapter 13	Periodic Motion
14	21 December 2016	Chapter 13	Periodic Motion

### Homework:

#### Exams:

1<sup>st</sup> Midterm : 19 October , 2017 (includes from chapter 1 to chapter 7)

2<sup>nd</sup> Midterm : **7 December , 2017** (includes from chapter 8 to chapter 10)

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.