

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



### PHY 123E (CRN 14818) - 2022/2023 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 September 2022	Chapter 1	Units, Physical Quantities, and Vectors
2	26 September 2022	Chapter 2 and 3	Kinematics
3	3 October 2022	Chapter 4	Newton's Laws of Motion
4	10 October 2022	Chapter 5	Applying Newton's Laws
5	17 October 2022	Chapter 6	Work and Kinetic Energy
6	24 October 2022	Chapter 7	Potential Energy and Energy Conservation
7	31 October 2022	Chapter 8	Momentum, Impulse, and Collisions
	7 November 2022		Semester Break
8	14 November 2022	Chapter 8	Momentum, Impulse, and Collisions
9	21 November 2022	Chapter 9	Kinematics of Rotational Motion
10	28 November 2022	Chapter 10	Dynamics of Rotational Motion
11	5 December 2022	Chapter 10	Dynamics of Rotational Motion
12	12 December 2022	Chapter 12	Gravitation
13	19 December 2022	Chapter 13	Periodic Motion
14	26 December 2022	Chapter 13	Periodic Motion

# Exams:

1<sup>st</sup> Midterm: November, 2022 (includes from chapter 1 to chapter 6)

2<sup>nd</sup> Midterm: December, 2022 (includes from chapter 7 to 10)

Final Exam: 2-15 January, 2023 (Exact date and time will be announced by the Student Administration Office.)

(Includes all chapters).

## **Letter Grade Weights:**

 $\begin{array}{ll} \text{Midterm 1} & : 30\% \\ \text{Midterm 2} & : 30\% \\ \text{Final} & : 40\% \end{array}$ 

## Attention

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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.

Please keep track of the web page <a href="https://www2.fizik.itu.edu.tr/turhan/phy123/">https://www2.fizik.itu.edu.tr/turhan/phy123/</a> not to miss any announcements.