



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



## PHYSICS 101E – 2023/2024 FALL

### TEXTBOOK:

H. D. Young and R. A. Freedman, University Physics 12th-14th Ed. Pearson (2008, 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	October 2, 2023	Chapter 1	Units, Physical Quantities, and Vectors
2	October 9, 2023	Chapter 2 and 3	Kinematics
3	October 16, 2023	Chapter 4	Newton's Laws of Motion
4	October 23, 2023	Chapter 5	Applying Newton's Laws
5	October 30, 2023	Chapter 6	Work and Kinetic Energy
6	November 6, 2023	Chapter 7	Potential Energy and Energy Conservation
7	November 13, 2023	Chapter 8	Momentum, Impulse, and Collisions
8	November 20, 2023	Chapter 8	Momentum, Impulse, and Collisions
9	November 27, 2023	Chapter 9	Kinematics of Rotational Motion
10	December 4, 2023	Chapter 10	Dynamics of Rotational Motion
11	December 11, 2023	Chapter 10	Dynamics of Rotational Motion
12	December 18, 2023	Chapter 12	Gravitation
13	December 25, 2023	Chapter 13	Periodic Motion
14	January 1, 2024	Chapter 13	Periodic Motion

### Exams:

Midterm I : November 4, 2023 Saturday, 10:00 – 12:00. Topics: Chapter 1 – Chapter 5

Midterm II : December 16, 2023 Saturday, 10:00 – 12:00. Topics: Chapter 1 – Chapter 9

Final Exam : (Exact date and time will be announced by the Student Administration Office. Includes all chapters).

**Letter Grade Weights:** Midterm I : 30%, Midterm II : 30%, Final Exam : 40%

### Remarks

- The exams will consist of multiple-choice questions. Exam grades will be calculated by subtracting one quarter of the number of wrong answers from the number of correct answers. If the resulting grade is negative, the grade will be considered as zero.
- Students, who do not attend at least one of the in-term exams, are not admitted to the final exam and get VF.
- Letter grades are assigned in accordance with the guidelines set by the Senate.
- All course announcements and materials will be posted on both <https://fizik.itu.edu.tr> and the 'ninoa' system. It is the responsibility of students to regularly check these websites for updates.