

PHYS 151 : College Physics I

A noncalculus one semester course for preprofessional or nonengineering majors. Study of the basic concepts of physics, including the fundamental principles and theories in mechanics, energy, and waves.

Credits 3

Lecture Hours 3

Designation

DP

Prerequisites

Credit for or registration in MATH 140 or higher, or consent of instructor

Corequisites

PHYS 151L.

Course Outcomes

- Demonstrate a general understanding of the underlying philosophy of the physics, including the scientific method.
- Apply the basic concepts of physics, including mechanics, energy, simple oscillatory systems, gas laws and fluid dynamics.
- Apply the concept of conservation laws in problem solving.
- Apply basic algebraic and graphical analysis techniques to physics problems.
- Compare and contrast macroscopic and microscopic systems in physics.
- Define quantitatively and qualitatively the common terms used in physics.
- Assess the limitations of the scientific method and apply error analysis.
- Determine when to apply physics principles to everyday situations.