

PHYS 151 : College Physics I

Credits: 3

Class Hours: 3 lecture

Prerequisites: Qualified for MATH 140X.

Corequisite Courses:

PHYS 151L

Recommended: Previous Physics experience suggested but not required. A strong background in algebra and trigonometry is recommended.

Description: This course is the first half of a two-semester introduction to the fundamentals of physics and will cover kinematics, dynamics, energy, collisions and momentum, rotation, waves and sounds, as well as select topics on material properties and thermodynamics. Lectures and problem-solving will regularly use the mathematical tools of algebra, geometry, trigonometry, and vectors.

Semester Offered: Fall

Designation:

Diversification: Physical Sciences – DP

Course Student Learning Outcomes (CSLOs):

1. Solve given problems involving kinematics, dynamics, energy, collisions and momentum, rotation, waves and sound, as well as selected topics on material properties and thermodynamics using algebra and trigonometry.
2. Analyze and interpret graphical information related to force, energy, and motion.
3. Explain how deviations from simplified/mathematical models occur when compared to real world situations. Identify the factors which cause the model's inaccuracy or failure.