

PHYS 272 : General Physics II

Credits: 3

Class Hours: 3 lecture

Prerequisites: "C" or higher or concurrent enrollment in MATH 242. "C" or higher in PHYS 170 or PHYS 175.

Corequisite Courses:

PHYS 272L

Description: This course is the second half of a two-semester introduction to the fundamentals of physics and will cover electromagnetism, the wave and particle nature of light, optics, nuclear physics, as well as selected topics from particle physics, string theory, quantum physics, relativity and condensed matter physics. Lectures and problem solving will regularly use the mathematical tools of algebra, geometry, trigonometry, vectors, and calculus.

Semester Offered: Spring

Designation:

Diversification: Physical Sciences – DP

Course Student Learning Outcomes (CSLOs):

1. 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.
2. Analyze and interpret ExB fields, ray diagrams, and line spectra.
3. Solve given problems involving ExB fields, electromagnetism, electromagnetic radiation, optics, quantum physics, and spectra using algebra, trigonometry, vectors, and calculus.