

PHYS& 116L: GENERAL PHYSICS III WITH LAB

Basic principles of physics presented without use of calculus. Suitable for students majoring in technically oriented fields other than engineering or the physical sciences. Sound, light, and modern physics. (E)

Course Student Learning Outcomes

1. Describe, explain, and use concepts and formulas to analyze and solve problems relating to superposition, oscillations, traveling and standing waves, and sound waves.
2. Describe, explain, and use the concepts of the particle and wave models of light to solve problems and design and build optical instruments.
3. Describe, explain, and use Einstein's special relativity and quantum mechanics to analyze and solve problems dealing with relativistic speeds and quantized energies.
4. Describe, explain, and use the Bohr model to analyze and solve problems about atoms, molecules, and nuclear decay.
5. Carry out and interpret experiments in the laboratory to answer waves, optics, and modern physics questions during lab, as well on assessments.

Credits: 5

Prerequisites: CHEM& 121L or higher; PHYS& 115L or 122L or instructor's permission.

Program: [Physics](#)