

Department of Physics and Astronomy

Robert F. Carlton, Chair
Wiser-Patten Science Building 219

The Department of Physics and Astronomy offers a minor at the graduate level.

Courses in Physics [PHYS]

Graduate standing and consent of instructor are prerequisites for graduate courses in physics.

5310 Electricity and Magnetism. Three credits. Topics including electric and magnetic fields, electrostatic potential, and potential energy and fields in matter discussed in a mathematically rigorous manner. A variety of good applications of mathematical methods in physics.

5380 Introduction to Quantum Mechanics. Three credits. Origin of quantum theory; wave packets and deBroglie waves; Heisenberg uncertainty principles. Schroedinger wave equation, operators, eigenfunctions, square well potential, the harmonic oscillator, the hydrogen atom, molecular binding and molecular spectra.

6330 Principles of Modern Physics. Three credits. Charged particles and their behaviors; electronic structures of the atoms; nuclear structures and processes; and radiation.

6340 Fundamentals of Physics. Six credits. Basic laws and principles of classical and modern physics. Lecture topics and laboratory experiences designed to advance student's knowledge of physics.

