Nebraska Wesleyan University

PHYS 4000 Quantum and Atomic Physics

Catalog

2018-2019

Course Description

An introduction to the Schrodinger equation and its solution. Topics studied include the 1D infinite square well, simple harmonic oscillator potential, and finite rectangular well/barrier, and the hydrogen atom, including the theory of angular momentum. Theories of atomic scattering will also be explored.
Three lectures per week.
One recitation per week.
Prerequisite(s): PHYS 2400 Introduction to Modern Physics and MATH 2600 Calculus III or MATH 3100 Differential Equations and computer programming skills or permission of the instructor.
(Normally offered alternate spring semesters.)

Course Hours

4 hours

Departments

1. Physics, Astronomy, and Computer Science