Course Number PHY-220-01

Course Description

A second course in modern physics covering special relativity and an introduction to quantum mechanics. Topics include relativistic kinematics, relativistic dynamics, four-vector notation, relativistic collisions, origins of quantum mechanics, Schrodinger's equation and the development of wave mechanics, applications of wave mechanics in one and three dimensions (step potential, square well, harmonic oscillator), angular momentum operators, the hydrogen atom, Dirac notation and matrix formulation of linear operators, Dirac Delta function, spin angular momentum, measurement theory, and time-independent perturbation theory.

Academic Term

22/FA

Instructor

Orzel, Chad

Location & Meeting Time

Integrated Science & Engineering Complex-118 M/W/F 09:15AM-10:20AM LEC

Integrated Science & Engineering Complex-118 T 08:00AM-08:50AM LEC

Credits

1.00

Capacity

18

Total Students

4

Interdisciplinary Programs
Environmental Science & Policy
Academic Department
Physics and Astronomy

Field Of Study

Physics (PHY)