

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

21/FA

Instructor

Mann, Elizabeth

Location & Meeting Time

Integrated Science & Engineering Complex-018 M/W/F 10:30AM-11:35AM LEC

Integrated Science & Engineering Complex-018 TH 03:50PM-04:45PM LEC

Credits

1.00

Capacity

18

Total Students

8

Interdisciplinary Programs

Environmental Science & Policy

Academic Department

Physics and Astronomy

Field Of Study

Physics (PHY)