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
20/FA
Instructor
Mann, Elizabeth
Location & Meeting Time
Integrated Science & Engineering Complex-222+ M/W/F 11:00AM-12:05PM LEC
Integrated Science & Engineering Complex-018 T 04:00PM-04:55PM LEC
Hybrid-HYBR LEC
Petition
N
Credits
1.00
Capacity
18
Total Students
12
Additional Information
http://www.union.edu/Physics
Interdisciplinary Programs
Environmental Science & Policy
Academic Department
Physics and Astronomy
Field Of Study
Physics (PHY)