



Virtual Labs for Physics

With **Connect Virtual Labs for Physics**, the Lab is Always Open. These virtual lab experiments provide a flexible online lab solution for preparation, supplement, replacement or use with a textbook to bridge the gap between the lecture and lab. Accessible simulations help students learn the data acquisition and analysis skills needed, then check for understanding and provide feedback. With pre-lab and post-lab assessment available, instructors can customize each assignment.

Mechanics
Free Fall
Trajectory
Inclined Plane
Friction Force
Terminal Velocity
Kinetic and Potential Energy
Collisions in One Dimension
Collisions in Two Dimensions
Rotation, Moment of Inertia
Harmonic Oscillation
Uniform Circular Motion
Finding the Density of an Object

Waves
Doppler
Standing Waves
Beats

Electricity and Magnetism
Batteries, Resistors, and Currents
Charging Capacitor
Wheatstone Bridge
Electron Beam in a Magnetic Field
Induction
Impedance
Photo-Electric Effect

Optics
Image Construction on Curved Mirrors
Image Construction Through Lenses
Refraction, Snell's Law, and Chromatic Dispersion
Light Polarization
Double-Slit Interference and Diffraction

Thermodynamics
Calorimetry