

## General Physics

Version 3

### Introduction:

- Lab 1: Introduction to Science
- Lab 2: General Lab Safety
- Lab 3: Measurements and Uncertainty

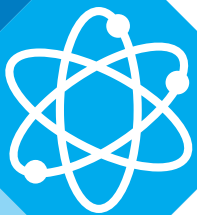
### Newtonian Mechanics:

- Lab 4: 1-D Kinematics
- Lab 5: 2-D Kinematics and Projectile Motion
- Lab 6: Newton's Laws
- Lab 7: Circular Motion
- Lab 8: Gravity
- Lab 9: Conservation of Energy
- Lab 10: Conservation of Momentum
- Lab 11: Torque and Static Equilibrium
- Lab 12: Buoyant Force and Archimedes Principle

### Waves:

- Lab 13: Simple Harmonic Motion
- Lab 14: Properties of Waves





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## Heat and Thermodynamics:

Lab 15: Ideal Gas Law

Lab 16: First Law of Thermodynamics

Lab 17: Second Law of Thermodynamics  
and Entropy

## Electricity:

Lab 18: Electric Charge and Coulomb's  
Law

Lab 19: Electric Field and Potential

Lab 20: Gauss's Law

## Circuits:

Lab 21: Capacitance

Lab 22: Resistivity and Ohm's Law

Lab 23: Kirchhoff's Laws

## Magnetism:

Lab 24: Magnetic Forces and Fields

Lab 25: Faraday's Law

## Light and Optics:

Lab 26: Snell's Law and Total Internal  
Reflection

Lab 27: Interference

Lab 28: Geometric Optics, Ray Tracing,  
and Image Formation

## Appendix: Good Lab Techniques