

TABLE OF CONTENTS

Licensing

1: Waves

- 1.1: Wave Mathematics
- 1.2: Wave Properties
- 1.3: Energy Transmission
- 1.4: Superposition and Interference
- 1.5: Standing Waves

3: Physical Optics

- 3.1: Light as a Wave
- 3.2: Double-Slit Interference
- 3.3: Diffraction Gratings
- 3.4: Single-Slit Diffraction
- 3.5: Thin Film Interference
- 3.6: Reflection, Refraction, and Dispersion
- 3.7: Polarization

4: Geometrical Optics

- 4.1: Images
- 4.2: Magnification
- 4.3: Spherical Reflectors
- 4.4: Spherical Refractors
- 4.5: Thin Lenses
- 4.6: Multiple Optical Devices
- 4.7: Wrap-Up

5: Fundamentals of Thermodynamics

- 5.1: Temperature
- 5.2: Thermal Expansion
- 5.3: Heat Capacity and Phase Transitions
- 5.4: Modes of Heat Transfer
- 5.5: Thermodynamic States of Ideal Gases
- 5.6: Equipartition of Energy
- 5.7: Thermodynamic Processes
- 5.8: Special Processes

6: Applications of Thermodynamics

- 6.1: More Processes
- 6.2: Engines and Thermal Efficiency
- 6.3: Entropy
- 6.4: The Second Law of Thermodynamics

7: Fluid Mechanics

- [7.1: Static Fluids](#)
- [7.2: Buoyancy](#)
- [7.3: Fluid Dynamics](#)

[Index](#)

[Glossary](#)

[Detailed Licensing](#)