

# Physics for Scientists and Engineers I

PHY 2048H

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# Chapter 1 - Introduction

- I. General
- II. International System of Units
- III. Conversion of units
- IV. Dimensional Analysis
- V. Problem Solving Strategies

# I. Objectives of Physics

- Find the limited number of fundamental laws that govern natural phenomena.
- Use these laws to develop theories that can predict the results of future experiments.
- Express the laws in the language of mathematics.
- Physics is divided into six major areas:
  1. Classical Mechanics (PHY2048)
  2. Relativity
  3. Thermodynamics
  4. Electromagnetism (PHY2049)
  5. Optics (PHY2049)
  6. Quantum Mechanics