

# General Physics

## Content Outline

---

### I. Introduction to Physics

- Significant dates in the history of physics
- Scientific measurements
- Scientific methods

### II. Kinematics

- Linear motion
- Non-linear motion

### III. Newton's Laws of Motion

- Law of Inertia
- Law of Motion
- Law of Action and Reaction

### IV. Friction

- Concepts of friction
- Coefficient of friction

### V. Work, Energy and Power

- Concept of work
- Kinds of energy
- Computation of energy and power

### VI. Impulse and Momentum

- Relationship between impulse and momentum
- Computation of impulse and momentum

### VII. Gravity

- Copernicus's, Brahe's and Kepler's Early Theories on Gravity
- Newton's Law of Universal Gravitation

### VIII. Elasticity

- Concepts of elasticity
- Stress
- Strain
- Hooke's Law

