Textbook: *Conceptual Physics*, Paul G. Hewitt, Prentic Hall, 201102

Grade Determination:

Semester Grade: Tests = 75 %; Classwork (Homework and Labs) = 25 %; Participation = Extra Credit
Final Grade: 0.40 × (Semester 1 + Semester 2) + 0.20 × Final Exam (Cumulative)

First Semester

Chapter	Topic
1	**Topic 1: Nature of Science** 1. Describing Science 2. Steps of the scientific method
-	**Topic 2: Measurement** 1. Accuracy and precision 2. Metric Units and Prefixes 3. Graphing
2, 10	**Topic 3: Motion** 1. Nature of motion 2. Acceleration 3. Center of mass
4, 5, 6	**Topic 4: Forces** 1. Newton's First Law 2. Newton's Second Law 3. Newton's Third Law
8	**Topic 5: Energy** 1. Nature of energy 2. Energy transformations 3. Sources of energy

Second Semester

Chapter	Topic
8, 7	**Topic 6: Machines** 1. Work and Power 2. Using machines 3. Simple machines 4. Momentum
25	**Topic 7: Waves** 1. Nature of waves 2. Types of Waves 3. Wave properties 4. Wave Behavior
26	**Topic 8: Sound** 1. Sound waves 2. Music 3. Beats 4. Reverberation 5. Hearing
27–31	**Topic 9: Light – Mirrors and Lenses** 1. Light and Matter 2. Reflection and Mirrors 3. Refraction and Lenses 4. Total internal reflection 5. Using mirrors and Lenses
27	**Topic 10: Electromagnetic Radiation** 1. Nature of electromagnetic waves 2. The Electromagnetic Spectrum 3. Parts of the Electromagnetic spectrum 4. Using Electromagnetic Waves: Telecommunications
21, 22	**Topic 11: Heat** 1. Heat and Specific Heat 2. Thermal Energy 3. Heat Transfer 4. Heat Engines
19	**Topic 12: Fluids** 1. Pressure 2. Floating 3. Work with fluids