



Course Outline
Physics 112
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Physics is heavily based upon problem solving. This means physics relies less on memory and more on applying ideas and concepts to solve problems. If you want to do well in physics, you need to understand how to approach problems, organize the information you're given, apply concepts and utilize math to solve problems.

Review: Basic Knowledge and Skills

Curriculum

Unit 1: Kinematics

- Section 1 - Vector Analysis
- Section 2 - Graphical Analysis
- Section 3 - Mathematical Analysis

Unit 2: Dynamics

- Section 1 - Types of Forces and Free Body Diagrams
- Section 2 - Newton's Laws
- Section 3 - Introduction to Momentum (If Time Allows)

Unit 3: Work and Energy

- Section 1 - Work
- Section 2 - Types of Energy and Work-Energy Theorems
- Section 3 - Systems and the Conservation of Energy
- Section 4 - Power and Efficiency

Unit 4: Waves (If Time Allows)

- Section 1 - Type of Waves
- Section 2 - Fundamental Properties
- Section 3 - Wave Behaviors

Formative assessments will be given to provide feedback, determine what you can do well and what you need to improve upon, help you develop the ability to self-assess and involve you actively in your learning.

Summative assessments will be used to evaluate your learning at the end of an instructional period.

Materials

Binder or Notebook
Scientific Calculator
Ruler/Protractor
Pen/Pencil

Evaluation

TBD