PHY 122 - GENERAL PHYSICS II

Course Description

This course is a continuation of PHY 121. Topics include thermodynamics, waves, electricity, electric circuits, magnetism, and optics. The laboratory covers the preceding topics in parallel with the lecture whenever possible. The development of conceptual understanding and problem solving skills is emphasized. Group 1 lab course.

Credit Hours

4

Contact Hours

6

Lecture Hours

4

Required Prerequisites

PHY 121, PHY 121L, MTH 122

Corequisites

PHY 122L

Recommended Prerequisites or Skills Competencies

ENG 111

General Education Outcomes supported by this course

Quantitative Reasoning

Course Learning Outcomes

Knowledge:

- Define: physical quantities, physical laws, and physical process.

Application:

- Determine relevant information.
- Determine which scientific and mathematical principles apply.
- Apply appropriate conceptual problem-solving strategies.
- Apply appropriate quantitative problem-solving strategies.

Integration:

- Extend the learned physical concepts to novel problem-solving scenarios.

Human Dimension:

- Interact with lab partners to achieve the given objectives.

Caring - Civic Learning:

- Relate everyday observations of the natural world to physics concepts.
- Learn to care more deeply about the natural world.

Learning How to Learn:

- Learn that they CAN understand seemingly complex physical concepts.
- Learn that they CAN problem-solve beyond memorized algorithms.