PHY 105 - PHYSICS OF THE WORLD AROUND US

Course Description

This course is an introduction to the fundamental principles developed to describe the physical universe. In particular, the subjects of mechanics, heat, electricity and magnetism, waves, and light are surveyed. The development of conceptual understanding and critical-thinking skills is emphasized. Group 1 lab course.

Credit Hours

4

Contact Hours

5

Lecture Hours

3

Required Prerequisites

MTH 23

Corequisites

PHY 105L

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 processes.

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 conceptual 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.