

PHYS 111 : Physical Science I

This course is intended for learners in non-science programs and offers experiences that allow them to understand the physical aspects of the environment. The procedure takes an interdisciplinary approach to the laws and principles of physics applied to matter and energy. The Learner develops an understanding of basic scientific concepts, gain familiarity with scientific materials, equipment, laboratory techniques, and procedures. The course gives to the principles of physics, chemistry, geology, meteorology, and astronomy.

Credits 3

Prerequisites

Any 3 credit hours of MATH. LIBR 150 may be taken concurrently.

Prerequisite Courses

MATH 110

MATH 120

MATH 250

LIBR 150

Course Outcomes

After successfully completing the course, the learner will be able to:

- Communicate scientific principles and ideas effectively.
- Use appropriate scientific principles and qualitative and mathematical techniques, as appropriate, to solve problems pertaining to the physical sciences.
- Analyze, interpret and apply data and use scientific data to evaluate hypotheses in physics and astronomy.
- Collect, evaluate, and interpret both secondary and primary data using appropriate scientific measurements and appropriately report associated size and experimental errors.
- Describe the size and scale of bodies in the universe.
- Develop skills of planning and conducting investigative research, gathering information, teamwork, and evaluating their findings.
- Evaluate and solve common problems in mechanics through the application of basic principles of motion and Newton's Laws.
- Explain the scientific concept of energy, including the different forms of energy, how it moves, the laws that govern it, and its importance to human society and our future.
- Identify the major branches of physics and describe the seminal concepts within each.
- Understand the role science plays in our society.

Competency

Scientific Reasoning