



MONROE COUNTY
COMMUNITY COLLEGE

Course Outcome Summary

General Education Satisfier Course

Technical Physics 101

Course Information

Division	Science/Mathematics
Credit Hours	4
Contact Hours	5 (45 hours lecture, 30 hours lab)

Prerequisites RDG 090 and ENGL 090 and MATH 124, MATH 151, or a qualifying scores on accepted placement tests

Course Description

This course is designed for technical majors to provide an understanding of physical principles and their application to industry and certain technical occupations. Topic coverage reflects the general needs of the various technician programs while giving a broad overview of the physical world around us. Topics included are measurement, kinematics, mechanics, rotational motion and dynamics, simple machines, matter, fluids and fluid flow, heat and thermodynamics, waves, and sound. Course requires laboratory work.

This course is approved as a General Education competency satisfier.

General Education Goal: Critical Thinking

Competency: CI GE Natural Science Competency

Learning Outcome: Understand and apply the elements of scientific inquiry and scientific principles in a natural science college laboratory course setting.

General Education Learning Objectives

1. Observe and describe natural phenomena and formulate hypotheses.
2. Plan and implement scientific experiments to test hypothesis.
3. Utilize scientific laboratory skills for data collection within a college laboratory setting.
4. Evaluate experimental data and propose solutions based on this data.
5. Evaluate the proposed implications of a solution.



Course Outcomes

In order to evidence success in this course, the students will be able to:

1. Observe some natural phenomenon and be able to formulate a hypotheses.
Applies to General Education Objective
Observe and describe natural phenomena and formulate hypotheses.
2. Be able to determine the needed equipment to collect appropriate data.
Applies to General Education Objective
Plan and implement scientific experiments to test hypothesis.
3. Set up the experimental equipment to be utilized for data collection.
Applies to General Education Objective
Utilize scientific laboratory skills for data collection within a college laboratory setting.
4. Collect the data either by hand or computer and record it properly in table format, if appropriate.
5. Apply the proper statistical analysis to the previously collected data.
Applies to General Education Objective
Evaluate experimental data and propose solutions based on this data.
6. Draw conclusions about your data.
7. Determine if your conclusions support your hypothesis.
Applies to General Education Objective
Evaluate the proposed implications of a solution.