

# PHYS 1230L-ALGEBRA-BASED PHYSICS | LAB 1 CREDITS

## **SYLLABUS**

### CATALOG DESCRIPTION

A series of laboratory experiments associated with the material presented in PHYS 1230. Meets New Mexico Lower-Division General Education Common Core Curriculum area III: Science (NMCCN 1111).

Co-requisite: PHYS 1230 Algebra-based Physics I

Semester Offered: Fall, Spring

## **Common Student Learning Outcomes**

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

#### **BROAD AND SPECIALIZED LEARNING**

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

#### CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

## CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

## **EFFECTIVE COMMUNICATION**

Students will exchange ideas and information with clarity in multiple contexts.

#### **INFORMATION LITERACY**

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

### INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

#### **Student Learning Outcomes:**

Upon completion of this course, the student will be able to:

- 1. Explain the scientific method.
- 2. Test ideas using modern laboratory equipment.
- **3.** Estimate experimental uncertainties using statistical methods.
- 4. Use computers to analyze and report laboratory results.
- **5.** Draw appropriate conclusions from quantitative scientific observations.

<b>6.</b> Accurately and clearly communicate the results of scientific experiments.		