

Physics 163: Physics Lab

Content of the Course

This laboratory course covers topics in elementary mechanics. Goal: to witness some of the laws and equations of physics "in action." In this course, we will not be "verifying" these laws; they've been tested for hundreds of years and seem pretty sound. Instead, we will concentrate on making connections between what you observe in the lab and the theoretical concepts and equations discussed in lecture and in the textbook.

This separately graded course will, in some ways, parallel the material covered in lecture, but the two courses are not closely tied together. Sometimes you will encounter concepts in the laboratory course first, and at other times you will encounter concepts first in lecture.

Occasionally, you may even perform an experiment related to material that is not covered in the lecture class.

Prerequisites

Concurrent enrollment in Physics 153.

This schedule, the lab study guide, and other docs are available at: www.plu.edu/physics/courses/

Spring 2026 Schedule of Laboratory Topics

Week of February 2	No Labs
Week of February 9	Significant Figures AND Intro to Computational Analysis
Week of February 16	No Labs (Presidents' Day)
Week of February 23	Acceleration in Freefall: Tape Timer and Excel
Week of March 2	Vector Addition/Force Table
Week of March 9	Projectile Motion: Video Analysis
Week of March 16	Lab Quiz #1 (see study guide on website)
Week of March 23	No Labs (Spring Break)
Week of March 30	No Labs (Easter Break)
Week of April 6	Friction Forces
Week of April 13	Collisions in 1-D
Week of April 20	Mass and Rotation
Week of April 27	Conservation of Angular Momentum
Week of May 4	Standing Waves: Waves on a String
Week of May 11	Lab Quiz #2 (see study guide on website)
Week of May 18	No Labs (Finals Week)