

Physics 136/164: Semester II Physics Lab

Content of the Course

This laboratory course will cover topics pertaining to electricity, magnetism, and optics. 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 2 courses are not closely tied together. Sometimes you will encounter concepts in the laboratory course first, and other times, it will be the other way around. Occasionally, you may even perform an experiment related to material that is not covered in the lecture class.

Prerequisites:

For Physics 136 (spring semester, summer): Physics 125 or equivalent, with lab, & concurrent enrollment in Physics 126.

For Physics 164 (fall and spring semesters): Physics 153 or equivalent, with lab, & concurrent enrollment in Physics 154.

Spring 2016 Schedule of Laboratory Topics

Week of February 8	No Labs
Week of February 15	(President's day) No Labs
Week of February 22	DC circuits I
Week of February 29	Electric Field and Electric Potential
Week of March 7	DC Circuits II
Week of March 14	Polarized Light
Week of March 21	(Good Friday) No Labs
Week of March 28	(Spring break) No Labs
Week of April 4	Lab Quiz #1 (see study guide on website)
Week of April 11	Electromagnetic Induction
Week of April 18	Geometrical Optics
Week of April 25	Thin Lenses
Week of May 2	Diffraction and Interference of Light
Week of May 9	Atomic Spectra
Week of May 16	Lab Quiz #2 (see study guide on website)
Week of May 23	No Labs (finals week)