

SUMMER SESSION II 2019

PHYS 1512 Lab Syllabus

Fill in the spaces below for your section during the first day of lab:

Section & Time: R22 meets at 3:00 pm
Professor: _____
Contact Info: _____
Meeting Location: Freeman B08
Required Materials: *Physics II Course Pack*, purchase in Freeman 208
Lab notebook (**NOT** a collection of loose-leaf paper!)
Recommended Materials: USB flash drive, calculator

This lab is meant to act as both an extension and a supplement to the lectures for Phys 1502, 1602, and 1702.

Grade Policy:

Lab reports: 80%

Final: 20%

Preparation for the experiment

- Thoroughly read the lab manual for a given experiment before coming to lab.
- There will be exercises for each lab that you must turn in at the beginning of lab.
- We will have a pre-lab lecture to “fill in the gaps” of your pre-lab reading.

- do not wait until five minutes before lab to print out your report,
- keep a backup copy of your lab report,
- and save your work constantly.

Lab Reports

- Out of 11 labs for the semester, the lowest *non-zero* lab report will be dropped. (Lab reports *not turned in* will count as zeros, and thus not dropped.)
- The lab reports are the most important part of the course, and must be turned in *at the beginning* of the following lab.
- Follow the guidelines in the Physics I lab manual¹ for the reports, most importantly that each student must turn in **his/her own work**.

Obviously you may encounter technical difficulties (computers crashing, printers not working, *etc.*), but you should anticipate that such problems may occur. That is,

¹If you need another copy of these guidelines, ask your instructor.

- 1 Standing Waves**
- 2 Optics I: Refraction, Reflection, and Polarization**
- 3 Optics II: Lenses**
- 4 Laser: Interference and diffraction**
- 5 Atomic Spectra and the Grating Spectrometer**
- 6 Equipotentials and Electric Fields**
- 7 DC Circuits and Ohm's Law**
- 8 RC Circuits**
- 9 Alternating Current (AC) Measurements**
- 10 Faraday's Law**
- 11 Charge-to-mass ratio (e/m) of an electron**