

FALL 2009

Physics 2401: Principles of Physics II Lab/Recitation

Section: _____

Section Instructor: _____

<u>Date</u>	<u>Experiment</u>
Aug. 31 – Sep. 3	Introduction to Laboratory & Recitation Refraction of Light/Thin Lenses and Mirrors
Sep. 7-10	No Labs
Sep. 14-17	Diffraction and Interference
Sep. 21-24	The Diffraction Grating and Optical Spectra
Sep. 28-Oct. 1	Electrostatic Fields and Potentials/Electrostatic Machines
Oct. 5-8	Ohm's Law: Simple Resistance/Ohm's Law III
Oct. 12-15	No Labs
Oct. 19-22	RC Transient Conditions/Use of a Digital Oscilloscope
Oct. 26-29	Current Balance
Nov. 2-5	Dipole Bar Magnet/ e/m Measurements/Making a Speaker
Nov. 9-12	Magnetic Fields from Currents
Nov. 16-19	Electromagnetic Induction and Faraday's Law
Nov. 30-Dec. 3	Alternating Current:RL and RC Circuits

Each student is expected to:

1. Prepare beforehand by studying the Lab Manual and be ready for a short quiz in each lab. Purchase a new manual as it is updated and revised yearly.
2. Exercise care with the equipment. You are accountable for damage from willful misuse. **NO food or drinks are allowed in the labs.**
3. Laboratory Notebook: A bound lab notebook is to be kept with raw data and notes on the experiment as taken during the lab session. Keep the notebook for future reference.
4. Before leaving the lab, show your data to the instructor and obtain his/her signature in your notebook.
5. Attend all labs. There will be no lab make-ups. The lowest grade will be dropped at the end of the semester to accommodate legitimate absences (illness, etc.).
6. Laboratory Reports: Write your report as required in the manual or as discussed in more detail by your instructor. Generally, include in your report the following:
 - a. Short summary of the objective of the experiment and how the measurements were made.
 - b. Presentation of your measurements and other data in well-organized form. Use the tabular format for results whenever possible.
 - c. Show your calculations.
 - d. Discuss the experimental errors and clearly present your results with error estimates.
 - e. Include units for all numerical results.
 - f. Discuss your results and draw conclusions from your results.
 - g. Answer all questions asked in the manual and number them accordingly.
 - h. The reports should be well organized and concise. Expect a lower grade for poor presentation (or sloppy measurements and data handling).
 - i. The reports are always due at the beginning of the next laboratory session.

Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the instructor as soon as possible so that the necessary accommodations can be made. Proper documentation must be presented from the Dean of Students' Office.