

Laboratory Manual: *Experiments for an Introductory Physics Course*, 5th ed., Wood-Lewis; or 6th ed., Wood-Lewis-Wiegert

If you are retaking the course within a five-year period, and you are happy with the final lab grade you received previously, you may use that lab grade again and you do not have to attend the lab. You do have to remain registered for the lab, but you do not have to attend. Please notify the Lab Coordinator (see contact information below) **BEFORE THE END OF THE DROP/ADD PERIOD** so that your seat may be made available to another student. If you would like to improve your grade, or are taking the course again after five years, you must do **ALL** of the required lab exercises again and take the lab exam.

Physics 1112L /1212L/1312L Lab Syllabus**Fall 2009****Room 319--Physics**

Week	Date	Experiment	Exercise #
1	Aug. 17 - 21	NO LAB	
2	Aug. 24 - 28	Reflection and Refraction	15
3	Aug. 31 - Sept. 4	Image Formation by Lenses	16
4	Sept. 7 - 11	NO LAB	
5	Sept. 14 - 18	Interference and Diffraction 1	17
6	Sept. 21 - 25	Interference and Diffraction 2	17
7	Sept. 28 – Oct. 2	Diffraction Grating Spectrometer	18
8	Oct. 5 - 9	NO LAB	
9	Oct. 12 - 16	Electric Fields—Mandatory (see #8 on page 2)	12
10	Oct. 19 - 23	Ohm's Law 1	13
11	Oct. 26 – 30	Ohm's Law 2—Kirchhoff's Rules	13
12	Nov. 2 - 6	Magnetic Field Measurements	14
13	Nov. 9 - 13	<i>Make-up Lab (see #10 on page 3)</i>	
14	Nov. 16 - 20	<i>Lab Finals—Attend at your regular day and time.</i>	
15	Nov. 23 - 27	NO LAB	
16	Nov. 30 - Dec. 4	<i>Attend your regular lab to view lab final and get final grade.</i>	
17	Dec. 7 - 11		

You may never attend a lab section other than the one for which you registered unless you have permission from the Laboratory Coordinator (contact information below). Your TA cannot authorize this.

Laboratory Coordinator: Tom Barnello Room 310 Physics, (706)542-2903, tjbar@physast.uga.edu
We welcome any comments or suggestions on the lab course evaluation for improving the laboratory course. Thank you.

MINIMUM REQUIREMENTS:

- 1. You must complete at least 7 experiments.**
- 2. You must take the lab final.**

Failure to do either of these will result in a grade of ZERO for the lab course.

Please note: The rules below and on the next page supersede anything your Teaching Assistant (TA) tells you to the contrary. If that happens, please bring it to the attention of your TA, or ask the Laboratory Coordinator for clarification.

1. **Preparation:** You must read through the experiment and also relevant material in the textbook **before** attending the lab. The more prepared you are the better, especially in those cases where the lab gets ahead of the lecture.
2. The only things you need to bring to the lab are your lab manual, a calculator, and a pen or pencil. **If you bring a completed worksheet from another student into the lab, or even a worksheet of your own from a previous semester, you will receive a zero for that experiment and that zero will count in your final average.** (Please put your name on your calculator in case it gets lost. Room 310 is the Lost and Found repository for the physics building.)
3. **Sign In:** You **must** sign in when you enter the lab. A sign-in sheet will be located on the lab bench at the front of the room. ***Not signing in may result in a grade penalty for that experiment.***
4. **Late Policy:** At the start of the lab the TA will outline important procedures and safety guidelines. ***Please do not be late!*** The labs will start promptly at the scheduled time. **Approximately 10** minutes after that, the door to the lab room will be locked and a sign will be posted on the door, which says, “You have arrived too late to do the experiment.” If the door is locked and/or that sign is posted, you have missed the lab and will receive a zero for that experiment.
5. After the introductory lecture, you will perform the experiment. You will usually perform the experiment with a lab partner, but **you must answer all questions on the worksheet IN YOUR OWN WORDS.** ***Not doing so will result in a grade penalty.***
6. **Clean Up and Check Out:** When you have completed the experiment, please clean up your station! Remove all trash and follow the guidelines given by your TA or written on the front board for dismantling the equipment to make it ready for the next class. After you have cleaned up, call the TA over to check you out. Write your name **and your lab partner’s name** at the top of the worksheet and give it to the TA. If you have handed in a worksheet and cleaned up your station properly, the TA will put a check next to your name on the sign-in sheet. ***Do not leave the lab room before your TA has checked-off your name on the sign-in sheet. Leaving the lab without checking out will result in a grade penalty.***
7. **Please keep all graded worksheets on file.** In the event that a grade is not recorded properly, you may be asked to bring in the graded report as proof that you completed the lab.
8. **Special Case—Electric Fields and Equipotential Lines Experiment (Exercise #12):** Everyone must do this experiment and the grade will count, even if it is your lowest grade. If you miss this experiment, even if it is the only experiment you missed, you **MUST** attend the *make-up lab session* (see schedule) to make it up.

9. **Laboratory Grade:** Your lab grade will be a combination of:

- a. The average of the best 8 out of 9 grades you receive on your lab worksheets = 70% of the lab grade.
 - b. The grade on the lab final = 30% of the lab grade.
10. **Missing an experiment:** There are all sorts of reasons that you might have for missing an experiment. Some reasons may be considered “*legitimate*” excuses and some may not. What may seem like a *legitimate* excuse to you may not be considered one by us. What constitutes a *legitimate* excuse will be at the discretion of the Laboratory Coordinator, but includes such things as illness requiring a visit to the doctor; university-related travel; etc. Missing an experiment because your car broke down, the bus ran late, the power went out and your alarm did not wake you, you had to study for a test, you were ill but did not see a doctor or go to the Health Center, etc., **are NOT considered legitimate excuses.**

If you miss an experiment with a legitimate excuse, ALWAYS get documentation to prove it—a note on official letterhead, signed by an appropriate authority: doctor, professor, etc. Even missing an experiment to attend a “family-related event,” must be proven by some form of documentation: a wedding invitation, funeral notice, etc. (Most funeral homes will provide this documentation.) You may have to provide that documentation to the Lab Coordinator in the event that you miss more than two experiments (see (c) below). If you know in advance that you are going to miss a lab, but you are not sure if the reason will be considered a legitimate excuse, please contact the Laboratory Coordinator.

CAUTION: If you miss an experiment without a legitimate excuse you may forfeit your right to do more than one make-up lab if more than one is necessary (see (c) below).

a.) Missing One Experiment: If you miss one experiment—as long as it is not Exercise #12 (see #8 above)--you do not have to make it up since we only take the best 8 of 9 worksheet grades. If you want to make it up, however, you may; just attend at your regular day and time during the make-up lab date show on the schedule.

b.) Missing Two Experiments: If you miss two experiments, you **must** make up one of them. If one of them is Exercise #12, then you **must** make up that one. Attend at your regular day and time during the make-up lab date shown on the schedule.

c.) Missing Three (or more) Experiments: If you miss a third experiment (or know in advance that you will be missing a third experiment) contact the Laboratory Coordinator **IMMEDIATELY—the same day if possible!** The Lab Coordinator will deal with these situations on a case-by-case basis and decide if you can do an additional make-up lab based on how many legitimate excuses you have and what type of documentation you provide to prove them.

11. **Missing the Lab Final:** If you miss the lab final contact the Lab Coordinator **IMMEDIATELY—the same day if possible!** Remember, as stated in the minimum requirements on page 1, you **must** take the lab final or you will receive a ZERO for the lab course.