

Labs begin the Week of January 30th

MINIMUM REQUIREMENTS:

You must complete at least 7 experiments. Failure to do so will result in a grade of ZERO for the lab. (Since we take the best 8 out of 10 worksheet grades—see #10 on page 3—if you ONLY complete 7 experiments, one of your worksheet grades will be a zero.)

Laboratory Manual:

Experiments for an Introductory Physics Course 2017 Edition UGA Dept. of Physics and Astronomy (Hayden-McNeil Publishing).

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) as soon as possible if you want to exercise this option. (Please do so **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 final.

Physics 1112L /1212L/1312L Lab Syllabus Spring 2023

Week	Date	Experiment	Exercise #
1	9-Jan	NO LAB	
2	16-Jan	NO LAB	
3	23-Jan	NO LAB	
4	30-Jan	First Diagnostic Test/Introductory Laboratory Exercise	1
5	6-Feb	Reflection and Refraction	15
6	13-Feb	Image Formation by Lenses	16
7	20-Feb	Interference and Diffraction 1	17
8	27-Feb	Interference and Diffraction 2	17
9	6-Mar	NO LAB	
10	13-Mar	Diffraction Grating Spectrometer	18
11	20-Mar	Electric Fields and Equipotential Lines (print worksheet)	12
12	27-Mar	Ohm's Law 1	13
13	3-Apr	Ohm's Law 2 -- Kirchhoff's Rules	13
14	10-Apr	Magnetic Field Measurements	14
15	17-Apr	Lab Exam	
16	24-Apr	Second Diagnostic Test/Lab Exam Review	
17	1-May	NO LAB	

Laboratory Coordinator: Dan Boyd Room 310 Physics, 706-542-2903, Daniel.Boyd@uga.edu

(Please include which course you are taking and the day and time of your lab in your correspondence.) We welcome any comments or suggestions on the lab course evaluation for improving the laboratory course. Thank you.

Please note: The information below and on the following pages supersedes 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 any relevant material in the textbook before attending the lab. The labs are not a lecture and will not be treated as such. The more prepared you are the better, especially in those cases where the lab gets ahead of the lecture. Some labs may have a quiz that must be completed before attending lab. These quizzes will be over both theoretical knowledge and equipment used in the lab. The quizzes will open a week prior to the lab that it corresponds with and be graded for 20% of that week's lab.
2. The only things you need to bring to the lab are your lab manual, a calculator, and a 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. The department is not liable for any personal belongings that are lost or missing.
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. *PLEASE NOTE:* The late policy is intended for an occasional late arrival. It does not mean you can show up late to every lab. If the TA sees that you are abusing the late policy, he or she may deny you entry.
5. The introductory lecture is intended to provide instructions regarding safety or critical steps for the experiment to be successful. It is NOT intended to be a lecture over the materials.
6. 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**. Only one submission from each group must be turned in for grading. Both partner's names must be written at the top of the report in order for both members to receive credit. Your partner is not liable if you do not fill in your own worksheet during the experiment. If you have questions regarding gradings of the report you should discuss with your partner and then with your TA if necessary.
7. Clean Up and Check Out: When you have completed the experiment, please clean up your station! Remove all trash and leave the station as you found it. 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.*

8. At the end of the next lab meeting the TA will hand back the graded worksheet from the previous experiment. This is the time to ask the TA to correct any mistakes he or she has made in grading—NOT at the end of the semester when you realize that you need a few more points to raise your grade level. All such requests at the end of the semester will be denied.
9. 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.
10. You will receive a zero for each experiment that you do not perform.

Laboratory Grade: Your overall lab grade will be a combination of:

- a. Worksheet Grade: The average of the best 8 out of 10 grades you receive on your lab worksheets = 70% of the lab grade. (If you have only completed the minimum number of 7 experiments, then one worksheet grade will be a zero. **If you have completed less than 7 experiments, your entire lab grade will be a zero, not just your Worksheet grade.**)
- b. Lab Final Grade = 30% of the lab grade.
- c. Grade Web Site—you may view your grades online at any time by going to

<https://www.physast.uga.edu/student>

or

<https://uga.view.usg.edu/d2l/login>

Note: Please check your online grades on a regular basis. Every once in a while, a TA may make a mistake in entering a grade. If you find an error, please tell your TA as soon as possible.

Withdrawals: All withdrawals are done online through Athena. The lecture and lab are linked together as a 4-credit course. This means that you cannot withdraw from one without withdrawing from the other. **If you withdraw, you can no longer attend the lab and you will have to repeat ALL of the experiments again if you retake the course, no matter how many you have completed at the time of your withdrawal.**

Missing an experiment: *Please read these sections carefully—then read them again!*

Keep in mind that there are many lab sections and that, on average, 2 students miss lab in each section each time an experiment is performed. This means many students are absent each week we have lab which is why **you cannot simply attend another lab section later in the week if you miss a lab** and why we operate under the rules given below.

CAUTION: *You must be very careful about missing experiments.* In other words, leave open the option of missing an experiment for “life’s unforeseen circumstances.”

- a.) Missing One or Two Experiments: You will not be penalized since we only take the best 8 of 10 worksheet grades.
- b.) Missing Three Experiments: You will get a zero for the third miss.
- c.) **If you complete less than 7 experiments your entire lab grade will be zero.**

We will only stray from these rules under university guidance.

Lab Final

- a.) **The lab finals are given in the lab at your regular day and time during the week shown on the schedule. THEY ARE NOT GIVEN DURING THE WEEK OF FINAL EXAMS. Do not make any appointments or schedule anything that will keep you from taking the lab final on your appointed date and time.**

- b.) **Missing the Lab Final:** If you miss the lab final **contact the Lab Coordinator IMMEDIATELY—the same day if possible!** The Lab Coordinator will decide if you will be allowed to do a make-up final possibly in another lab section during the dates of the lab final. **If you miss the lab final without a legitimate excuse, you may still be able to do a make-up final, but you will be penalized.**

The department has the right to adjust any policy found herein as seen fit and without notice.