

## Labs begin on June 21 and 22

Page 1 of 3

*To make it a more comfortable situation for everyone since there still may be people who have not been vaccinated we strongly encourage you to wear a mask while you are in the building and in the lab room.*

The course is being taught as a hybrid, with some in-person experiments and some online experiments on eLC. **The very first experiment scheduled for June 21 and 22 will be done online by everyone.**

### **Laboratory Manual:**

The lab manual is *Experiments for an Introductory Physics Course*, 2016 or 2017 Edition, UGA Dept. of Physics and Astronomy (Hayden-McNeil Publishing). You must purchase a lab manual. It contains the experiments for both courses in a sequence.

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 exam.

### **Physics 1112L /1212L Lab Syllabus Summer 2021**

<b>Week</b>	<b>Date</b>	<b>Experiment</b>	<b>Exercise #</b>
1b	June 11	<b>NO LAB</b>	
2a	June 14 - 15	<b>NO LAB</b>	
2b	June 16 - 17	<b>NO LAB</b>	
3a	<b>June 21 - 22</b>	First Diagnostic Test/Intro Lab	
3b	June 23 - 24	Reflection and Refraction	15
4a	June 28 - 29	Image Formation by Lenses	16
4b	June 30 – July 1	Interference and Diffraction 1	17
5a	<b>July 5 - 6</b>	<b>NO LAB</b>	
5b	July 7 - 8	Interference and Diffraction 2	17
6a	July 12 - 13	Electric Fields and Equipotential Lines	12
6b	July 14 - 15	Electronics 1—Ohm's Law--Online	
7a	July 19 - 20	Electronics 2—Equivalent Resistance and Capacitors--Online	
7b	July 21 - 22	Electronics 3—Kirchhoff's Rules--Online	
8a	July 26 - 27	Magnetic Field Measurements	14
8b	July 29	<b>Lab Exam</b>	
9a	Aug. 2 - 3	Second Diagnostic Test	

**Laboratory Coordinator:** Tom Barnello Room 310 Physics, 706-542-2903, [tjbar@uga.edu](mailto:tjbar@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 rules below and on the next pages 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.

**The labs will be a hybrid of some in-person experiments and some online experiments.**

### **Safety**

1. **BEFORE entering the lab room** get a disinfectant wipe from the station in the hallway and bring it into the room.
2. To adhere to proper social distancing only one-third of the students from a lab section will be allowed in the lab room at one time with one student working at each lab station. (Your TA will let you know if you need to attend in person to do an experiment.) The lab stations used should be clearly indicated, but your TA will point them out.
3. When you get to your lab station wipe down all of the equipment with the disinfectant wipe and throw the wipe in the trash.
4. There are sneeze guards placed at the lab stations.
5. Since we do not want papers to exchange hands, everyone, including the students performing the experiments in person, will submit their results online.

### **General**

1. You will be performing two experiments each week. As mentioned above, one-third of the students in a lab section will be attending an experiment in person at their scheduled day and time. The TAs will break up the roll into three groups—Groups A, B and C. Group A will attend in person to do an experiment while Groups B and C will do the same experiment online. For the next experiment Group B will attend and Groups A and C will do it online, and so forth throughout the semester. The TAs will let you know which group you are in and what experiments you have to do in person.
2. **For all experiments** you must read through the experiment in the lab manual (a required purchase) and relevant material in the textbook, and if you are doing the experiment in person please view the online presentation of that experiment **before attending the lab**. The more prepared you are the better, especially in those cases where the lab gets ahead of the lecture.
3. **The online experiments** will be located on eLC and your TAs will be giving you the details on how they will be performed. The Mon/Tues experiment will be posted Sunday night, and you will be able to submit results any time from Monday at 9 a.m. to midnight on Tuesday. The Wed/Thurs experiment will be posted Tuesday night, and you will be able to submit results any time from Wednesday at 9 a.m. to midnight on Thursday.
4. **For the in-person experiments** the only things you need to bring to the lab (besides the disinfectant wipe mentioned above) 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.)

5. **Late Policy for in-person labs.** 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.”
6. **Check-out and Clean Up for in-person labs.** When you have completed the experiment, you **must** clean up your station! You do not have to disinfect it again but remove all trash and follow the guidelines given by your TA for dismantling the equipment to make it ready for the next class. After you have cleaned up, let the TA know that you are done.

## **7. Laboratory Grade**

### **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, however, if you only complete 7 experiments, one of your worksheet grades will be a zero.**

**You will receive a zero for each experiment that you do not perform. There are no make-up labs.**

Your 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 Exam Grade = 30% of the lab grade.

**Grade Web Site**—your grades will be recorded in eLC, and also on the physics web site below which is used to compute the overall lab grade that is submitted to your lecturer. You may view your grades online at any time by going to

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

**Note: Please check your grades on a regular basis, both on eLC and the physics web site. 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. DO NOT contact your TA the end of the semester about “regrading” an experiment 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.**

8. **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 or complete the online experiments 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.**
9. **Lab Exams--**The lab exams are scheduled for Thursday, July 29. **THEY ARE NOT GIVEN DURING THE WEEK OF FINAL EXAMS.** Please do not make any appointments for that day.