

Physics I (PHYS:1701) – Fall 2014
 Mondays 7-9:50pm and Tuesdays 8-10:50am
 Room 353VAN

TA: Catherine Whiting

Office: 215 Van Allen Hall (way in the back corner)

Office Hours: Thursdays 1:30-2:30pm, 215 VAN

Tutorial Hours: MTW 11am-12pm and Th 11am-1pm in 310 VAN (TILE Study Lounge), Other TA's hours listed on the door to 310 VAN and here:

<http://physics.uiowa.edu/resources/fall-2014-physics-tutorial-schedule>

Email: catherine-whiting@uiowa.edu

LAB MANUAL: C. Williamson and J.A. Goree, *Experiments in Mechanics, Wave Motion and Heat*

LAB SCHEDULE:

Week	8/25	9/1	9/8	9/15	9/22	9/29	10/6	10/13
Lab	No Lab	No Lab	M1	M2	Exam	M3	M4	M5

Date	10/20	10/27	11/3	11/10	11/17	12/1	12/8	12/15
Lab	Exam	M6	M7	M8.5	Exam	M9	M10	No Lab

DROPPING OR CHANGING SECTIONS: Changes in course registration including adding, dropping, and changes in sections, will be made by office personnel in 203 VAN.

MAKEUP LABS: Makeup labs are not allowed. Instead, your lowest lab score will be dropped. If you wish to attend the other lab section, you may do so with my prior permission.

GRADES: Your total lab grade accounts for 15% of the total course grade. Each lab is graded out of 100 points and is due at the **end** of the period. This includes answering the pre-lab questions **before** you come to lab (10 points). The point break down for each week varies, and includes these categories most weeks: Pre-Lab, Data/Graphs, Units/Sig. Figs, Sample Calculations, Analysis Questions, and Clean-up.

Guidelines for Grades: **Pre-Lab:** Read the Introductory Material and then answer the Pre-Lab questions before lab. Please don't hesitate to ask me for help with the pre-lab questions or the background material for the labs. **Data/Graphs:** To get the maximum Data/Graphs points, be sure to take all of the data needed, include all of the relevant plots, and make sure to always include a title for your plot and label both axes, with units. **Units/Sig. Figs.:** I always check for units, as they are very important. I am more lenient on significant figures, but be reasonable. If your measuring device is a ruler, for example, you can only be precise to 1 mm, so you shouldn't record a length measurement as 1.8923345 m, nor should you quote it as 2m. (1.892m +/- 0.001m would be correct.) You should always measure to the precision of your device. **Sample Calculations:** Show your work for calculations stated in the lab manual at the end of the lab. The main point of this is if your results are way off, I can look back to your sample calculations and see if you just made a mistake in the calculations (rather than you did the experiment wrong). **Analysis Questions:** The point of the analysis questions is to reflect back on your experiment(s)

and determine whether your results were what you expected. Often, you will be asked what sort of things might have contributed to the error in your results. Things like air resistance, friction, not accounting for acceleration, etc., are all possible sources of error, however, human error is never acceptable! **Clean-up:** Please tidy up your lab bench before you leave, and it's 10 free points!

LAB TIPS:

1. Read the lab beforehand. This will enable you to work more efficiently during lab.
2. Do the labs neatly and use a pencil.
3. Do not hesitate to ask questions.
4. To get the maximum learning benefit from the labs, I suggest you:
 - a. Before and after the lab, try to think about the concepts of the lab, i.e., What is/was the point of this lab? What concept or physical relationship/law am I testing? How will I go about testing this relationship?
 - b. Before you take data, try to make a prediction about what you expect the results to be. After you have taken and analyzed the data, ask yourself whether it agrees with your prediction and if not, why not?

STUDENTS WITH DISABILITIES: Anyone who has a disability which may require some modification of seating, testing, or other class requirements should contact me so that a suitable arrangement can be made. Contact me after class or during office hours.

STUDENT PROCEDURES, RIGHTS, AND RESPONSIBILITIES: This course is given by the College of Liberal Arts & Sciences (CLAS). This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by CLAS. Students wishing to add or drop this course after the official deadline must receive the approval of the Dean of the CLAS. Details of the University policy of cross enrollments may be found at at: <http://www.uiowa.edu/~provost/deos/crossenroll.doc>. All students in CLAS courses have specific rights and responsibilities. You have the right to adjudication of any complaints you have about classroom activities or instructor actions. Information on these procedures is available in the CLAS Student Academic Handbook. You also have the right to expect a classroom environment that enables you to learn, including modifications if you have a disability. Your responsibilities to this class, and to your education as a whole, include attendance and participation. You are also expected to be honest and honorable in your fulfillment of assignments and in test-taking situations. You have a responsibility to the rest of the class and to the instructor to help create a classroom environment where all may learn. **COMPLAINTS, PLAGIARISM, AND CHEATING:** "Student Complaints Concerning Faculty Actions" and "Academic Misconduct" procedures are available for your review on-line at the CLAS website. The Department Chair, Prof. Mary Hall Reno, can be contacted through the Department of Physics & Astronomy Main Office in 203 VAN. As stated in the procedures noted above, complaints or comments regarding TA's should first be directed to the instructor. **Reacting Safely to Severe Weather:** The University of Iowa Operations Manual section 16.14 outlines appropriate responses to a tornado (i) or to a similar crisis. If a tornado or other severe weather is indicated by the UI outdoor warning system, members of the class should seek shelter in rooms and corridors in the innermost part of a building at the lowest level, staying clear of windows, corridors with windows, or large free-standing expanses such as auditoriums and cafeterias. The class will resume, if possible, after the UI outdoor warning system announces that the severe weather threat has ended.