

PHYSICS 1401 LABORATORY SCHEDULE FOR FALL 2010

INSTRUCTOR: Dr. M. L. Broyles, Office is J139 and Tel: (972) 881-5882
Office hrs: MWF 12:00 noon-1:00 PM, R 3:30-5:30 PM,
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use your college cougar email please

LAB MANUAL: Physics 1401 Laboratory Experiments by Wilson-green cover.
LAB SECTIONS: S3L meets T 2:30-5:20 PM in H130
S5L meets W 2:00-4:50 PM in H130
S6L meets M 2:00-4:50 PM in H130

LABORATORY CALENDAR

Week	Experiment
1	Introduction to the Physics Lab-Rules and Regulations
2	Ex 1 Experimental Uncertainty & Data Analysis
3	Ex 2 Measurement Instruments
4	Ex 3 Uniform Accelerated Motion (TI)
5	Ex 4 Projectile Motion- The Ballistic Pendulum
6	Ex 5 The Addition and Resolution of Vectors- The Force Table
7	Ex 6 Friction
8	Ex 8 Conservation of Linear Momentum (TI)
9	Ex 9 Centripetal Force
10	Ex 10 Torques Equilibrium, and Center of Gravity
11	Ex 11 Archimede's Principle-Buoyancy and Density
12	Ex 12 Specific Heats of Metals
13	Ex 13 Standing Waves in a String
14	Final Lab Exam

GRADING POLICY: Experiment write-ups are due at the beginning of the next lab. You should complete the "Advance Study Questions" before coming to the lab. The completed lab reports will consist of:

1. Advance Study Questions assigned.
2. Complete Data Tables that show an instructor signature. Do not leave the lab before you get me to initial at least one of your data tables.
3. Post Lab Questions assigned.
4. Graphs, if any are required.

Lab reports will be graded on a 100 point basis and only perfect reports will receive

100%. Questions that are assigned that are wrong or incorrect deduct 1-5 points. If you do not even attempt to answer an assigned question-that deducts up to 5 points. Graphs are worth 5-10 points per graph and all graphs must be correctly labeled with a title. The lab reports must be received on the date due or be subject to a late penalty of 5 pts/day. Any student that does not turn in a lab report but shows evidence of work in a lab group may receive only up to 50% for attendance and participation. You must be present in the lab if you want credit for the lab report and participation. You need to sign in for each lab session and obtain the instructor's signature on Data Tables before you leave. Data Tables not signed will receive a 10 point deduction on the lab grade. If you did not sign in and obtain the Data Table initials from the instructor, then the lab report will not receive credit and you will not receive credit for that lab.

Lab reports must be neat and clearly written. If I cannot read your answers your answers due to poor writing, then I cannot give you credit for that answer. All of your answers must be written in your own words. You are permitted to work in lab groups in completing the data tables but all answers to each and every question must be your own and not copied from anyone else in your lab group. Lab reports with torn or frayed edges are also subject to point deductions. Fill in the data tables in pencil, and if you have to erase, your data tables will not be messy. Smudge or dark marks that are due to photocopying are also subject to deductions. In other words, if you photocopy any or parts of the lab manual, then the quality must be good enough that I cannot tell any difference. Any extra attachments including graphs done on a computer, such as using EXCEL are excellent. Last date to submit lab reports is 12/03/10.

The first 20-30 minutes of each lab will be devoted to discussing the graded results of the previous lab and to the introduction of the experiment that we will be doing that day. The lab instructor will go over the theory and experimental procedures that you will need to successfully complete the lab. I will expect you to come to each and every lab fully prepared, which means you should carefully read the experiment before coming to the lab. I also expect you to be on time for each lab and ready to start when the lab is opened. I will not assign you to a specific lab group, unless that is your wish. Let's try and keep each lab group to 4 students maximum. We will generally have 6 lab stations or setups which will accommodate up to 4 students.

Note that the laboratory doors will remain locked at all times, do not try and prop the lab door open if you have to leave and take a break. I will open the lab at the start of the lab for you, if you have to take a short break-just knock on the door and someone will let you in. Please no eating or drinking in the lab and this includes bottled water.

We have been assigned 3 hours for each lab, most experiments will not take that long, any extra lab time is yours to use wisely-I will be glad to help you with any lecture related material-time permitting. If you wish to leave early and are satisfied with your experimental results, that is your choice. If you have the time and your data does not look good, it might not be a bad idea to repeat those section(s) of the experiment that look suspect. If you leave the lab without carefully checking your data, and you have bad data then that will affect your lab report. You should keep all of the lab reports that are handed back for your records. Check with the instructor before the end of the semester to make sure that you have all of your lab reports accounted for. Good luck and have a great semester!

PLEASE BE ON TIME TO YOUR LAB, REMEMBER TO WEAR SHOES THAT COVER YOUR FEET AS WELL AS PROPER ATTIRE.

PLEASE TURN OFF YOUR CELL PHONE WHILE ON THE LAB

ACADEMIC ETHICS: This course like all others at CC will follow the guidelines for academic ethics. We will not accept any work from students that shows evidence of copying material from other students, or copying material that has a copyright. This applies not only to exams, but also to lab reports and homework assignments.