

LABORATORY PROCEDURES AND GRADING
(REVISED 01/23/04)
(Supercedes rules in Laboratory Manual)

Physics 121/122

Laboratory: Spring 2004

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Text: **Fundamentals of Physics I: *Laboratory Manual***
Physics 121 or
Fundamentals of Physics II: *Laboratory Manual*
Physics 122
Be sure you have the **Summer 2003 ed.** Corrections and supplements to the manuals may be supplied as needed during the semester.

Attendance: Students are expected to attend the laboratory section for which they are registered.

Ten (10) experiments are scheduled. ***All 10 experiments must be completed to pass the course. If you miss even one lab, you will fail the entire course (including the lecture/recitation portion) regardless of how well you may be performing.***

Preparation: To ensure efficient use of lab time, it is essential for students to study the lab manual before class. In many cases it will then be possible to complete the lab report during the lab period.

Prelab exercises, when called for, must be given to your TA ***at the beginning of the lab period.*** Since this information will be needed for your lab, in most cases, you should make a photocopy for you TA to have. The prelab should be included in your lab report.

Before the first meeting of your lab, please do the following:

1. read and familiarize yourself with the introductory material in the lab manual and
2. read and prepare the prelab for the first lab, Experiment I.

Procedures: At the start of the lab, the TA will notify you which parts of the procedure will be done and what constitutes a lab report. This may differ from what is described in the manual. Students are

expected to spend the entire two-hour period in the lab. You should work on your write-up if you finish early.

Data sheets must be initialed by the TA before the end of the period.

Lab Reports:

Lab reports:

- must contain your name and the name of your partner.
- must include data sheet(s) initialed by your TA.
- should include an prelab or quiz initialed by your TA.
- must be your own written report (you cannot simply copy your partner's report.)

Lab reports will be absolutely “bare bones”, often just the data, relevant equations, plots and enough prose to make your report intelligible. **Long discussions are to be avoided. Do not reproduce large sections of the lab manual in your lab report!** Reports should be neat but not necessarily gorgeous or “professional looking.”

Where possible, lab reports are to be turned in at the end of the lab period. The final due date is the lab period following the one in which the experiment was done (one week, except for Thanksgiving). After this date, your lab report will be marked “completed” but will receive **no points** unless prior arrangements are made with the TA or instructor. Your TA will inform you each week what the due date will be.

Lab reports should be submitted to the TA during lab or to the locked box outside Room 3112, but **not** to the bins outside the TA offices. **It is your responsibility to be sure your TA receives your lab report, particularly if turned in late!**

Grading:

Each lab is worth up to 25 points, including the prelab. A correct prelab turned in upon arrival is worth up to 5 points. (See note about prelabs.) In cases where there is no prelab, there will be a quiz to determine if you read and understood the lab. The quiz will be worth 5 points and consist of two questions:

1. What is subject of this lab?
2. What will you do in this lab?

The quiz will last two or three minutes and will be given at the beginning of the class. **There will be no make-up quizzes!**

Labs will be graded on a “task” basis, with satisfactory completion of the task getting full credit and subtractions occurring due to failure to do the task or doing it substantially incorrectly. The emphasis is on completing the important elements and not fine-

scale distinctions.

TAs will grade and return lab reports as quickly as possible and hopefully no later than 2 weeks after the lab was performed. Students should keep their graded lab reports until they receive a final course grade.

Make-Up Weeks: If you must miss a scheduled lab because of illness, religious observance, or other valid reason, you may perform that lab during one of the two make-up weeks. Note: The first make-up session will be for Experiments 1 – 5 and the second make-up session will be for Experiments 6 – 10 **only**. In general, students can make up a lab during any of the regularly scheduled laboratory sessions during these make-up weeks; you do not have to go to your regular lab session during the make-up weeks. The one exception is if an entire section must make up a lab because Campus was closed due to snow or other emergency. In this case, you will be expected to make up the lab at your regular time with your regular TA during one of the make-up weeks. You will be informed via the **Announcement Page** on the web or by your TA which week the section will make up the missed lab. Reports for your make-up labs must be submitted to **your TA** within one week for grading. Prelabs must also be done and initialed by the TA at the beginning of the lab for make-up labs. Make-up sessions will be two hours. All TAs are expected to staff their sections during the make-up weeks. TAs are free to leave after 1 hour if no one shows to make-up a lab during that session.

A Note About Prelabs

1. Each lab is worth up to 25 pts. Of these 25 points, the prelab is worth 5 pts.
2. To earn all 5 pts for the prelab, it must be done **correctly** and **before lab**. You will earn 3 pts if you attempt the prelab before lab and turn it in to your TA as you arrive. Since in most cases you will need the results of the prelab to do the lab **you should make a photocopy for your TA to hand in upon arrival!**
3. A prelab done correctly is worth 2 pts. If the prelab is done in lab (i.e., **not** turned in at the beginning of lab) and attached to the lab report the maximum number of point possible for the lab will be 22 pts.
4. If the prelab is not done at all the maximum number of points drops to 20 pt. That is, each student must do the prelab and turn it in. Doing it before lab is worth 3 pts. You will lose 5 pts if you do not do the prelab!
5. If there is no prelab, there will be a short quiz at the beginning of lab. There will be two questions: (1) What is subject of this lab? and (2) What will you do in this lab?" To answer this question correctly requires reading the question correctly! The quiz will last two or three minutes and will be given at the beginning of the class. **There will be no make-up quizzes!**