

Physics 247 Fall 2005

Lab Policy

We will work in groups of ~3, and will switch groups after every exam. You will be expected to have a lab notebook (different than your lecture notebook) and it will be left in the lab room at the end of lab – there will be no need to take your notebook home!

The lab notebook can be quadrille (i.e. graph paper) or a regular notebook, but quadrille paper looks a lot better!

Missing Lab: If you need to miss a lab you must let me know in advance (outside of extenuating circumstances) for the lab to be “excused.” An excused lab can be made up the following week during another scheduled lab time. Unexcused labs cannot be made up, and will count as a zero.

You must look at the lab before you come to lab if you expect to do well – you need to know what you’re doing before you get here.

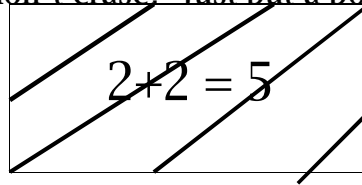
Grading: labs will be graded on the basis of the notebooks (see below for more information). Each lab will be worth 10 points, for a total of 110 points.

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Lab Notebooks

Lab notebooks are the most important tool of a physicist – here you keep all your notes and ideas about the experiment you’re working on. When writing in a lab notebook your work should be clear and neat, but don’t spend hours fixing it up! If you write something wrong, don’t erase! Just put a box

around it and cross-hatch the box, like this:
It’s amazing how many times you’ll find that it was actually correct in the first place.



(Total score possible =10)

Name of Lab, Today’s date, Purpose of Lab, Name of Partner (1 Point): Don’t forget this!

Notes (3 points):

What result are you looking for in this lab? How will you find it?
Comments about setup/quirks you encountered with the lab. Should be used for explaining how things are being done during the lab.
These notes should not just be in one lump, but dispersed throughout the lab notebook. There is no excuse for not having notes.

Data (2 points):

Raw data here – don’t do any analysis to it yet. In the case of computer experiments, a printout would be nice here. Sometimes the data in an experiment is fine, but the analysis is faulty, so it’s good to have the original data at hand.

Analysis/Uncertainty (2 points):

Process your data in whatever form is required for the experiment, and **include uncertainties** in your result, and explain **why** you included these uncertainties (if not obvious).

Conclusion (2 points):

Comment on your experimental findings (read the lab manual under “suggested procedure” for ideas on what to comment about if you’re stuck). Further tests/refinements required?