February, 2009

Freshman Physics Laboratory (Ph 3), Course Policy

Course Requirements

- Each laboratory experiment must to be completed and passed to pass the course.
- A report must be submitted for each experiment.
- Preparatory laboratory problems must be completed before being allowed to work on a new experiment.
- Late notebook policy: -1 point/day (out of 10 points) for non emergency reasons. No exceptions.
- Grading: freshmen/sophomores/juniors graded pass/fail; senior students receive letter grades.

Notebook

- All work must be done in a bound notebook such as National 43-648. No scratch paper and no erasing.
- Write-ups must be readable for evaluation. The primary focus of this course is on process not answers. Be neat!
- Notebooks must include a Table of Contents at the beginning; remember to leave room (2-3 blank pages) at the front of your notebook. Number and date each page. Cross out mistakes.
- Each lab write-up must contain: a short description of the procedure with set-up sketches, the data collected and the data analysis. It must end with a summary table and a short conclusion.
- All direct or indirect measurements must include uncertainties and units. Tabulated measurements must have units and label just in the headline. Use scientific notation and the international system of measurement. Units are symbols, not word abbreviations (e.g. seconds => s and not sec.). For example

$$c = (2.99792 \pm 0.00030) \cdot 10^8 \mathrm{m/s}, \quad \text{or} \quad c = (299.792 \pm 0.030)\mathrm{Mm/s}$$

- Graphs should be done on separate sheets and taped to the notebook. Graphs must always have a title, labeled axis and units.
- Each time an equation is used in the write-up, it must be explicitly reported.
- Make your results stand out: draw boxes around them.

Courtesy and Safety Rules

- As a courtesy to the other students who will use the benches, please clean up before leaving the lab.
- For safety reasons, food or drinks are not allowed in the laboratory.
- **Shoes are required. Students not wearing closed shoes will not be allowed to enter the laboratory premises**

Requirements for the First Week

- Purchase the course notes ("Vademecum for Data Analysis Beginners" and "Experiments Notes") at the Tech Express located in Lloyd House north side of the Olive Walk or download them from the ph3 web page www.ligo.caltech.edu/~vsanni/ph3.
- Purchase or re-use a bound notebook preferably one that can fit letter size sheets.
- Study chapter 1, chapter 2 , and chapter 3 of the data analysis notes.
- First lab. starts the week after the Organizational Meeting with the improperly called "Data Analysis Experiment".
- No pre-labs are due for the first week. Laboratory Location: East Bridge Room 308.