Lab Notebook Guidelines

Your laboratory notebook serves as the record of your lab activity. In industry, as in school, the notebook is an important document, a repository for ideas, designs, and technical work of all kinds. It is also a legal document. It can be subpoenaed as evidence in patent lawsuits. Most companies (and this class) demand a professionally kept, accurate notebook.

Please buy a **new notebook for this class**, and use it only for this class. Be sure the notebook is **bound**, with sequentially numbered pages. If you buy an unnumbered notebook, you may neatly number every page when you first start using the notebook.

Leave the first two pages blank for a **table of contents**. Then update your table as you complete each lab activity.

Pencil or pen is ok, but pen typically is preferred. Mistakes are lined out, not erased (this is a good habit to get into – it is expected that a legal document won't have eraser smudges all through it). Don't leave blank pages. If you want, you may neatly line through an entire page that is intentionally left blank (just a diagonal line across the page will suffice).

Please do your **prelab exercises directly in your notebook**. Your results are then readily available to compare to your measurements. If you do some work when your notebook is not available, you may tape pages of paper into your notebook. Generally this should be minimized.

While in the lab, your notebook should provide a complete and accurate description of laboratory activities, showing drawings and **sketches of circuits (or other experiment setups) including connections to test equipment**, and **textual description of measurement procedures**. Take the time to write it down! Ask yourself, "**Could I repeat this experiment in all its detail in six months time, working only from my notebook?."** If the answer is 'yes' then the level of detail is appropriate.

Your **data is recorded in clear tabular format**, with explanations linking measurement data to the description of the measurement being performed.

Where appropriate, **data is compared to theoretical predictions**. Data and theory are presented graphically where sensible. You may wish to plot your measurement data and theoretical results using a software package, and then paste (tape) your plots into your notebook. This is encouraged! Leave a bit of empty space in your notebook as you are going along, and simply write there "space left for plot" or "space left for figure" or whatever makes sense.

It is essential that your **notebook is legible**. It is not very useful (or believable) otherwise. It should be neatly organized, with graphical data, code listings, etc. pasted or taped in place, and tables and **graphs clearly labeled, especially including graph axes**.

Following these guidelines, your lab notebook will be a very useful document. When your notebook is kept correctly, your formal lab reports are a breeze since you are essentially just tidying up what is already in your notebook.