

# PHYS 2350: LAB NOTEBOOK FORMAT

It is important to get into the habit of keeping good records of your work. These become more important in your professional career; e.g. in disputes over intellectual property and invention – the question of who conceived and proved the concept first.

## REQUIRED FORMAT:

For each lab session, include the date, your name, and the name of your lab partner/s at the top of the page.

**Write in ink.** Use a single line to cross out any mistakes. You can always learn from your mistakes, even minor ones, if you keep a record of them. Use multiple ink colors if you can – helps with labelling and sketching diagrams.

Leave all the pages in the notebook. Do not tear any as these are numbered. Among professionals, this would be viewed with suspicion begging the question – why was this sheet removed?

## MINIMUM REQUIREMENTS:

*If any of these sections are missing, 5 points will be deducted. Additional points will be deducted depending on the quality of documentation in each section eg. missing uncertainties and/or units, incorrect wiring, etc..*

### 1. **Briefly state the objectives of the experiment:**

Since most experiments in our lab have several sections, separately state the objective for each section.

### 2. **Relevant Diagram of Apparatus used in the Experiment:**

This can be a simple sketch or a schematic from the documentation. You can do this any way you like as long as the necessary information is there and will help you later on when you write up the electronic lab report. Focus on including enough information to identify and reassemble the hardware at a later date if this is ever needed.

### 3. **Diagrams for Connections:**

Draw all your connections. This can be done as part of the diagram, but it's usually clearer and avoids generating very “busy” diagrams to make this separately. Make separate diagrams for electrical connections, optical arrangements etc.

### 4. **Instrument settings:**

Record them all so that you can reproduce the experiment if you ever needed to. Record everything.

### 5. **Procedures and Raw Data:**

Record what you did and what happened when you did it. Since you are recording the data with ink, none of these should be erased. If there are errors during the procedure note them down – these will help you should you have to retake the data.

### 6. **Analysis and Conclusions:**

Since you are doing most or all of your analysis in the electronic notebook – you will write this up as a summary of what was accomplished in the electronic notebook. If it makes sense, tabulate your final results. This is simply for the sake of completeness and will serve as a diary of the entire experiment.