Lab Report Format
Physics 2A, 4A-D

1. **TITLE**
   Place the title of the lab experiment at the top of the first page.

2. **OBJECTIVE**
   State the objective of the experiment clearly. The objective of the experiment is what you're trying to prove or accomplish.

3. **THEORY**
   Explain relevant concepts and provide any appropriate definitions. Pertinent equations should be derived in a clear, logical manner. Any relevant background information may also be included in this section.

4. **APPARATUS**
   Record a list of the equipment being used. Write down the serial number, model, and make of the equipment. You will need this information for reference in case you need to repeat the experiment or collect additional data. Describe the equipment being used and draw a diagram or picture of the equipment.

5. **PROCEDURE**
   This section includes your plan for performing the experiment. The experimental plan should be written in a step-by-step, orderly fashioned method. It describes in detail your procedure for performing the lab such that you or anyone else could re-create the experiment exactly as it was performed. The experiments in the lab manual/handouts already have a step-by-step written procedure. You may cut and paste the written procedure from your lab manual into your lab notebook. Keep in mind that you may need to repeat an experimental procedure during the lab final. (The lab handouts have the TITLE, OBJECTIVE, THEORY, APPARATUS, and PROCEDURE sections already written out, so you may cut and paste these sections into your lab notebook.)

6. **DATA**
   Your data should be well organized and easy to read. Label each set of data with the appropriate quantity being measured along with the trial/run number. Use 'table' format for easier reading. Your data should have the correct number of significant figures and appropriate units. If your data is represented by graphical methods, make sure your graph has been appropriately labeled with the correct axis, units, and scale. Any work that is printed out from the computer must be attached securely (taped, glued, stapled ....)to your lab notebook. DO NOT FOLD PRINTOUTS AND SLIP INTO NOTEBOOK! Any work that is done on the computer should not be saved on the hard drive! Once finished with your work, delete it and empty Recycle Bin.

7. **CALCULATIONS**
   Write down equations being used to do calculations. The calculations should be clear and readable. Show and label calculations in complete detail for any quantity. If you are repeating a calculation several times, you only need to show one sample calculation. The calculation for % error between experiment and theory should be included here.

8. **CONCLUSION & RESULTS**
   Include a discussion of the results and their significance. Address the experimental objective and state whether it was accomplished. Comment on the % error between theory and experiment. Identify at least two sources of experimental error (systematic or random) to account for the percentage error involved in the experiment. Explain how these errors effected the outcome of the experiment? Was the experimental result greater than or less than the theoretical value? Was this what you had anticipated? Explain why or why not? You may also discuss methods to eliminate or minimize these experimental errors.