

## Required Lab Report Format and Grading Rubric

Include the following items in the laboratory report heading:

- *Name*
- *Experiment No. and Title*
- *Date*
- *Course and section*

Include the following sections in the report:

**Objective: (4 pts)** ( Include here a brief statement of the purpose of the experiment, in your own thoughts and words. Include references to general physical principals under investigation.)

**Method: (4 pts)** (Describe sequentially how the experiment was performed. Include a lettered sketch or diagram of the apparatus. Make drawing with care---use a straightedge, and make it large enough to be useful in reading and interpreting the report.)

**Data Sheet: (4 pts)** (Include the actual, original data sheet on which you recorded data in the experiment. Develop the habit of neatness in data and note taking, so they will be suitable for inclusion in the report.)

**Results: (4 pts)** ( What were the results of the investigation? Give worked out and annotated examples of each type of calculation performed in the experiment. Summarize your results in tables or graphs here as appropriate. Make sure to label clearly all graphs, figures, or diagrams. Display your results clearly, and highlight the most important parts. Make sure to include units.) All graphs should have labeled axes with units, and with display of regression lines or curve fits with uncertainties and correlation statistics.

**Analysis and (4 pts)** (Identify and discuss the sources of error in the experiment. Calculate the percent error of your results relative to the expected values. Were your results consistent with the physical principles being investigated, within the measurement uncertainties of the apparatus? Answer all questions listed in the experiment handout distributed by the instructor.)

*Note: several handouts have empty data tables and answer blank for you to fill in. These may be copied and pasted into your report. But, do not merely copy the entire handout and submit as your report. Re-phrase the objective and method in your own words. Identically worded replicas from different students will result in loss of points.*