Laboratory Reports

- Overall level of reports: address your peers.
- Contents. There are generally accepted standards with respect to content. Style and format vary with different publications, but the content is usually:

  1. Physics related to the measurements. Predictions.
  2. Principles of the measurements. Description of apparatus and data-taking.
  3. Data and Data Analysis.
  4. Discussion of results.

  In this course there are no specific style requirements beyond those below:

- **Do**:

  1. Write in grammatically correct English.
  2. Write reports on a computer. You may use the computers in Room 310, which have various word processors. But an ASCII (text) file is also acceptable. Turn in a printed copy, not files.
  3. Graph data on a computer. But hand-drawn apparatus figures and circuits are acceptable and recommended. It's OK to paste in figures and graphs, if desired.
  4. Compute uncertainties in results. Any graph or table of experimental data should have at least one representative error bar. Since we will cover this subject in the course, this requirement will be relaxed for Experiment 1.

- Specific details on report writing:

    1. Always write in complete sentences. Don't let large sets of numbers clutter up the text; put them in tables.
    2. All figures, drawings and tables should be numbered. Refer to them by number in the text.
    3. Be sure to define or describe things **before** you refer to them. Failing to do this is one of the most common writing errors; it can produce text which is exasperating to read.
    4. Let the reader make the judgements. Don't make general, judgemental comments. Leave out your personal reactions and feelings, as well. Good scientific writing is grey, not colorful. It is appropriate, however, to comment about specifics, eg. "The measurment depends critically on the sensitivity of the ammeter."

- **Don't**:

    1. Give procedures or idiot lists.
    2. Present excessive detail about apparatus.
    3. Show arithmetic or algebra to the reader.