

## **REPORT TIPS AND GUIDELINES**

### **General:**

- Be concise. “Brevity is the soul of wit.” – Wm. Shakespeare
- Avoid use of first person. Also avoid use of second or third person. (Do not use words like “I”, “we”, “you”, “he”, etc.) The passive voice is appropriate for technical writing. Do not use contractions (don’t, wasn’t, etc.).
- NEVER use slang words or phrases in technical memoranda.
- Pay attention to the spell checker, and use the thesaurus to avoid using the same words too often. In addition, reread the report and/or try to get someone else to read it. Often the spell checker allows the wrong words to slip by.

### **Formatting:**

- All tables and figures require captions with a brief description of their contents.
  - Table captions belong above the tables.
  - Figure captions belong below the figures.
- All tables and figures should be referenced in the text.
- The important equations should be numbered.

### **Report Sections:**

- **Introduction**
  - Try not to keep it too short or too long. One to two paragraphs.
  - This is the motivation for the experiment. It is also a brief summary.
  - “Figure ##” should never appear here.
- **Methods and Procedures**
  - Avoid repeating the lab handout here. Try to describe the experimental setup from memory, and then use the lab handout for verification. Give as much theoretical background as is necessary for the data reduction to make sense.
  - General theory should be written in present tense. Experimental methods should be written in past tense. Do not mix tenses, particularly in a given sentence.
  - “Figure ## shows the data collected...” should never appear here. This is not the section for presenting results.
- **Results**
  - Include all of the important results, possibly organized into a table or figure. Do not include pages of raw data or the full spreadsheet used to reduce the data.
  - Always include units for the results. The parameters included in tables need units. The axes of figures need units. If a parameter is unit less, indicate this with empty brackets like so [ ].
  - “This is because ...” should never appear here. This is not the section for explaining results, just for presenting them.
- **Discussion**
  - Give good reasons for why the results occurred as they did. If they did not match theory, give good sources of error.
  - Be sure to discuss how the results determined in the experiments would affect your robot project. Recommend strategies for implementation of these results.
  - “Figure ## shows the ...” should never appear here. Neither should “the formulation for the ...”. This section is for discussing results, not for presenting them or formulation data reduction techniques.
- **Conclusion**
  - Briefly summarize the goals and accomplishments of your report.