General Writing Guidelines

Unit Operations Laboratory
Winter 2020

A. Audiences (all of the following will have access to the report)

1. Immediate supervisor who requested the work (i.e., main audience)
   a. Familiar with the problem and technology
   b. Needs to be convinced that your conclusions are correct
   c. Wants to read the main report, but not the gruesome details
   d. Will NOT be familiar with the experimental setup so you need to clearly describe the experimental setup and plan.
2. The supervisor's boss
   a. Doesn't know why the work was done
   b. Wants only the very essential information and results/conclusions
   c. Only has time to read the abstract (executive summary)
   d. Will NOT be familiar with the experimental setup so you need to clearly describe the experimental setup and plan.
3. Colleague doing similar work
   a. May pull your report out of the file cabinet 10 years from now
   b. Wants to know all assumptions made and calculation techniques employed
   c. Will read the appendix and compare your calculations to his/hers
   d. Will NOT be familiar with the experimental setup so you need to clearly describe the experimental setup and plan.

B. Neatness/Organization

1. Computer-drawn figures that are professional-looking.
2. Tables and text in the Appendix must look neat!
3. Is your written report organized in such that it is easy to follow? Did you identify the nomenclature used in the report?
4. Spacing should exist between each section of the report!
5. References should be used when appropriate. Include the year if referencing a website.

C. Grammar, spelling, and other thoughts!!!!

1. Use 3rd person for first report (i.e., the complete report) and 1st person for the second report (i.e., the memo report).
2. Have someone else proofread your document! (or read it aloud to someone else)
3. For numbers, spell the number if 10 or under. Write the number if 11 or greater. For equations, always refer to "Equation 6",etc.
4. Use superscripts (10^6) rather than 10^6.
5. All equations should be numbered (right justified)
6. Don't copy MathCad or Python equations into report since symbols are not universally used (e.g. the ^ or _ symbols).
7. Do not copy figures without referencing. Only include information in figures that will be discussed.

D. Language

1. “There is no such thing as good writing, only good re-writing”
2. Be clear: Say exactly what you mean, mean exactly what you say
3. Be brief: Watch out for wordiness--work it over again.
4. Be specific: words like “big”, “better”, “slightly”, etc. leave the reader guessing
5. Use past tense if referring to an experiment or something you did. Use present tense if describing equipment or a process that is currently in existence.
6. Avoid phrases like “we will then”
7. Avoid undefined pronouns like “it”, “they”, etc. You need to identify what “it” and “they” are referring to.
8. In all cases be specific. You are the expert.