

## Final Report

- Your report must be typed and should be *no more than 10 double-spaced pages of text*. Use reasonable margins (one inch), font size (12-point) and font. Include page numbers at the bottom of each page. Check your spelling.
- Attach Figures and Tables at the end of your report as supplemental information. Include as many Figures and Tables you feel are critical to tell your story, but don't include too many. Number each Figure and Table so that you can easily refer to each object in the text. Each object should have a caption to guide the reader. Figures and Tables do not count against your 10-page limit of text.
- One *suggested* structure:  
*Title/Author*

*Abstract:* In one paragraph succinctly summarize your report with your objective, how the work was performed, specific results and conclusions. This section is the most difficult to write, but it is the most important. If you don't capture the reader's interest in this section, it's likely the reader won't continue.

*Introduction:* Clearly identify the purpose of your technical investigation. Briefly review literature, highlighting important aspects and milestones. If you describe theories in this section, identify essential assumptions and relevant equations. If you introduce symbols or abbreviations, clearly define them.

*Methods and Materials:* Describe the major equipment and supplies that you used. You'll usually briefly describe step-by-step procedures, and, whenever possible, you'll refer to another source (e.g., ASTM, SOP, literature) for a detailed description. In some cases when you develop a new procedure, you'll describe it in greater detail.

*Results:* Use this section to present results with an appropriate description so that the reader understands the context of the results. *Do not include all of your results.* Only include those results that are typical and/or critical for your discussion. Label all Figures and Tables and include captions, titles and legends. Don't forget to include error bars whenever possible, and don't forget to state that error bars are smaller than your symbols if that's true. You may attach all of your Figures and Tables to the end of the report instead of integrating them in the text.

*Discussion of Results:* This section is sometimes combined with *Results* as a single section. You should compare your results to

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theory and/or related published data whenever possible. If your results are different from theory and/or other published data, you should present an hypothesis to explain these differences and provide additional evidence to support your hypothesis. You should describe and quantify errors and sources of variability whenever possible. Based on your results, you should tell a story that uses the evidence to convince the reader that your hypothesis is likely to be true.

*Conclusions:* Sometimes this section is called *Conclusions & Recommendations*. Succinctly summarize your results, including specific technical findings. Your conclusions should be no more than two paragraphs. If you include recommendations, you should specifically address ways to improve the experiments (e.g., materials, methods, etc.) and/or regions of parameter space that might be interesting for additional studies.

*References:* Choose a format for references and be consistent. Only include references that have been cited in the text.

## Business Memorandum

- Business memos are intended to be brief communications and rarely exceed two pages in length. Your memorandum should be *no more than a single page*. Use double-line spacing between elements of the memorandum. For the body of the memo, use single-line spacing within a paragraph and double-line spacing between paragraphs. Don't indent paragraphs in the body. Use reasonable page margins (one inch), font size (12-point) and font.
- Memorandums never include a salutation or a closing. Less formal salutations (Mike:) and closings (Thanks,) are used for informal communications like e-mail. More formal salutations (Dear Dr. Vicic:) and closings (Sincerely,) are reserved for formal communications like business letters.
- One *suggested* structure (each part of the memo is critical, and you'll find different people arrange this information in different ways):

### MEMORANDUM

Date: [Date]

To: [Name], [Title, if necessary]

From: [Name], [Title, if necessary]

RE: [Subject]

[Body]

- The body is comprised of four *unlabeled* parts, each with its own paragraph:

Purpose (often just a single sentence)

Summary (it's included early so managers with short attention spans still read your important findings and know what you did)

Background/Discussion (sometimes more than a paragraph, but it should still be brief)

Conclusion/Action