

# FINAL PROJECT

## General Advice on Writing

As you write up your final project report (and technical papers, in general), it is a good idea to begin by spending time considering your figures and tables. These represent the whole story of what you did for your project and once created and refined on paper, make the writing much easier. The text simply tells the story represented by the figures and tables.

Once you are satisfied that you understand the data through your work on the figures and tables, begin by writing up the methods section. This is the easiest and most straight forward section and gives you a starting point to getting text on the page. Next, move on to the results section which outlines and highlights the findings in your tables and figures. Third, write up your discussion section which synthesizes these findings and interprets them as a whole. Fourth, you should write up your conclusions section, summarizing and explaining 2-4 of the most important conclusions of your project.

The introduction is the last section you should write in your paper. By writing this section last, you are forced to outline what you plan on doing with what you actually did. This enhances the flow and continuity of your report from beginning to end. The four elements of a good introduction section are: 1) explaining the problem; 2) describing what has been done about the problem; 3) showing how what has been done was incomplete or inadequate somehow (otherwise, why are you doing it?); and 4) outlining what you are proposing to do about it and why it should work. The very last thing you should write is the abstract which summarizes the whole story.

## Format

Final project reports must be typed (double-spaced with 1 in. margins using a 12-point font). All formatting instructions given in previous handouts must be strictly followed. The report should consist of at least 10 pages of text (page numbered). Figures and tables should be added to the end of the document (after the References section) with the tables preceding the figures. Each table and figure should appear on separate pages, be numbered in order of appearance in the text, and captioned.

Your project should have an abstract, introduction section (contains the literature review), methods section explaining how you collected your data, results section highlighting findings in the figures and tables, discussion section interpreting these results, and conclusions section summarizing the findings. Except for the abstract, **PLEASE USE THESE SECTION TITLES IN YOUR REPORT.** You may certainly add subsection titles to ease the flow of thought through the report if you wish. If adding subsection titles, only capitalize the first letter of each main subtitle word.

## Grading

Your grade will be assessed as follows: 10 points for the four assignment drafts and figure/table check; 5 points each for layout, spelling, grammar, writing style (i.e. formal vs. informal; active vs. passive), and clarity; 10 points each for figures and tables; 15 points for the introduction and literature review; 20 points for interpretation; and 10 points for the summary section.

## **Common spelling mistakes**

Affect vs. effect. “Affect” is a verb, “effect” is a noun. Example: You can affect something to produce an effect.

Cannot. “Cannot” is one word. Example: I cannot eat that.

Downstream. “Downstream” is one word. The same principle applies to upstream, downslope, upslope, etc.

Its. This is the possessive form of “it.” Example: Its slope is 10 percent.

## **Notes**

Do not use contractions (e.g., “did not” instead of “didn’t”) in formal writing.

Quotation marks belong on the outside of periods and commas. Example: Johnny said, “Don’t eat that.”

A new paragraph begins with an indentation.

Two spaces should follow a period ending a sentence.

Data is plural. The data show that I am right.

Avoid the use of convoluted constructions such as “due to the fact that” or “the reason why is that” and use “because” instead. Glaciers flow because ice has a yield stress.

Avoid passive sentence structures. “I plotted the longitudinal profile” is much more interesting to read than “A longitudinal profile was plotted.”

Revise and rewrite.

The thesaurus function found on most text-editing software can be helpful for finding the right word.

The last step before printing should be running your text through a spell-check.

## **Resource**

Scientific Writing for Graduate Students (1968), Edited by F. Peter Woodford.