

Please note that the expectation for each of the pieces of the project now and moving forward is that you are presenting a “final draft” of the requested sections of the paper. This means that you should have appropriate paper formatting (title, authors, section headings, etc) and you have proofread carefully for typos. In addition, you should not be using Google Translate or a similar service to translate your report. If English is not your first language, please visit places like office hours or the Think Tank to get assistance with grammar and structure.

Your **Preliminary Report** will be 3-4 pages of text (not including figures, tables, etc) and will include the following sections:

Introduction - After reading this section a non-expert should be able to understand your topic in broad strokes and how your project adds to the knowledge of that topic.

Methods - Specifics on how your data was gathered. This section should make it clear how to reproduce your experiment, observational study, or sample survey (if you gathered your own data) or how the data that you use was collected and by whom. This section should also address potential sources of bias and how that bias is accounted for in your study.

Data Summaries and Visualization - Summarize the data. This should include the statistics found and how to interpret them in the context of your study. Include visualizations of your data with explanations in concise captions.

References - Citations of previous work in the body of your report AND citations of any data that was not actively collected by you.

Appendix - This section can include a variety of items. Frequently, there is some of the basic R-code for statistics/tests referred to in your project report, but you should not include full printouts of the data set. Additionally, if you conducted a survey, the appendix is a great place to show the survey given to study participants. Pretty much anything that you refer to in the report but would be too cumbersome to type out in the actual body of the report goes in the appendix. (In the text, you can even say "refer to the appendix to see ...")

Your **Final Report** will additionally have **Analysis** and **Conclusions** sections and should have 6 - 7 pages of text (not including figures, tables, citations, appendix, etc).

Analysis - Should demonstrate some of the inferential techniques from the class (hypothesis testing, confidence intervals, power analysis, parameter estimation).

Conclusions - Should summarize your project findings in context to the topic at hand. Also address why these results are (or are not) valuable and any future work that should be done on the topic by future researchers.

Your **Presentation** of your project will be approximately seven to ten-minutes in length, with project partners equally splitting the role of speaker (you can alternate or split the presentation in half). Presentations will be posted on D2L with questions addressed via the D2L Discussions tab. Either way, you should plan on a presentation with about 8 - 10 slides that gives the class a quick intro to your project, gives a visual narrative of your data, and shows the details of the statistics that you've done (it does not necessarily need to include the analysis section of the paper as it might not be done when the presentation is due).