ADA2 Project Writing Instructions:

Reports should be typed. In your data analyses, RAW AND UNINTERPRETED COMPUTER OUTPUT IS UNACCEPTABLE. You should have a caption by every figure and table that describes it and tells briefly what you see. For example, If you wanted to include an ANOVA table, you would give it a caption, something like "Table 1. ANOVA Table for ** data". And briefly describe what you see from the ANOVA table.

When writing "professional reports," it may be helpful to pretend that you are writing up the results of your data analyses for someone who has paid you to analyze the data. Remember that even that best data analysis is worthless if your reader can not understand it. The following are suggested format of your report.

Your project will consist of six parts: summary, introduction, Material and Methods/Experimental Design, Results of the Analysis, conclusions and appendix. In the following, I will describe what I expect for each part.

Summary: In this section, you will describe the results of the analyses. The summary should state the problem concisely, show what you found, and briefly interpret the results. A good rule to keep in mind is that a person who has only had an introductory statistics course should easily be able to understand the summary and grasp the results of your analysis.

Introduction: Give the background of the problem, with more detail than in the summary. State the goals of the study. At the end of this section, tell briefly what you plan to say in subsequent sections.

Material and Methods/ Experimental Design: A brief description of how the data were collected and what kind of statistical tools you want to use to address the problem you stated.

Results of the Analysis: In this section, tell the reader what you found and how you found it. You may need to include some revised outputs (not the raw output) to facilitate explanation. For example, you may include a table of the results of t test in the text. And usually, you will include the residual plots in the appendix. Organize the section to tell the story you uncovered, not the circuitous path you may have taken to get there. Interpret your results. Report any strange features of the data.

Conclusions: You should provide interpretation of the statistical results throughout the report and rehash the main results concisely in the Conclusion, using different wording than the summary. You may also include ideas you have about future studies.

Most people tend to read the summary and conclusions first, then look at the figures and tables. If they have further interest, they read other sections of the report. Consequently, your summary and conclusion should be understandable by someone who has not read the rest of the paper, and all figures and tables should have complete captions.

Appendix: Contains the technical details and plots not found in the Results section that you want your readers to know. Also include your R code in the Appendix.