

Report Writing for this Class

1. Target audience: clients who has some basic familiarity with statistics (at the level of PSTAT 5E or PSTAT 5A), but who has not taken advanced statistics courses
2. There is no unique format that is the best. Many formats were suggested. Some are confusing and conflict with each other. Use them as guidelines only
3. A brief summary or abstract at the beginning of the report is often useful
4. The introduction should provide a broad, general view of the topic. It should include a clear statement of objectives and indicate how far they have been carried out
5. The conclusions should summarize the main findings and perhaps recommend appropriate actions
6. The technical details in the main sections should be clear, concise and mathematically sound. Be as brief as you can while still including all important details
7. Do include important tables and plots. Do label all figures and tables so each is virtually understandable when viewed alone
8. Avoid unnecessary statistical jargon
9. Appendices are useful for detailed material which would break up the flow of the main argument if included in the main text
10. Use simple, clear English. Use short words and sentences
11. If you cannot think of exactly the right word, a reference book of synonyms or a Thesaurus may be helpful
12. Check spelling

One Possible Format

Title

Executive Summary : what the report is about, the problem you are trying to solve and the conclusions. As brief as possible

Introduction : describe the problem(s) and its background, what data are collected and how they are collected (if available), the objective(s) of the study

Methods Describe the data analysis completely and concisely so that a reader with more statistical expertise (the instructor in this case) can assess your work.

1. Brief description and plots for EPA
2. Define the model(s) and model parameters used in the analysis
3. Describe the statistical methods briefly
4. Provide reasonable details on data analysis including model selection, diagnostics, missing data, ...
5. Provide graphs and tables which you consider to be of *primary importance* in explaining statistical results
6. Discuss your inferences: hypothesis tests, confidence intervals, ...
7. ...

Results, conclusions and recommendations Also include reservations about the data and limitations of the data analysis (if any)

References If any

Appendix For a reader who is searching for details. Include additional graphs, calculations and portions of computer output which you consider to be of *secondary importance* in explaining the statistical results but which somehow support the conclusions of the main report