ESS345 report checklist

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Content

You may refer to this checklist when reviewing another student's report and for preparing the final version of your own report. The report should include the following elements:

title

• is specific and not too long

abstract

- o provides a succint summary of all sections of the report
- o does not exceed 200 words

1. introduction

- o provides incentive for the problem: why is this research important?
- presents an overview of the problem (important points of previous research; remember to provide good references)
- o comes up with a testable hypothesis which will be able to (dis)prove a point

2. method

- explain theoretical foundation of your report, in as much detail as your reader will need to understand the next section
- binds mathematical equations into the prose
- o don't get lost in coding details, point to Matlab code in an appendix

3. data and results

- o how did you acquire your data? (maybe reference)
- use tables and graphs rather than lengthy descriptions
- how did you "manipulate" the data to obtain a result?
- o note on possible errors in dataset
- note that another researcher should be able to reproduce your results given the same data (or be able to obtain the same data)

4. discussion

- test of hypothesis
- honest interpretation of results
- o you want to persuade the reader that your interpretation is valid
- note that another researcher may draw different conclusions from the same data you have used (therefore we ask you to separate the discussion from the data/results section)

5. conclusion

- o do your results support your hypothesis? if not: why not?
- what are shortcomings of your work?
- o may include ideas for future work

references

- o are all mentioned in the body of the text
- follow a consistent style; we suggest the APA style, see http://www.writing.utoronto.ca/advice/using-sources/documentation?start=2)

appendices

- o are mentioned in the body of the text
- here you should place your Matlab code, and for example figures that you think are important but did not really fit into the main part
- In an effort to save paper and so we may use your code in the future, we welcome
 electronic supplements. Please collate your matlab code, data files, appendix
 figures, and your PDF report into a single directory named with your names
 and email it to us. We still need one hardcopy of your written report (excluding
 appendices) by the deadline.

Writing

clarity of sentences

- \circ sentences have strong verbs and clear nouns
- o sentences avoid common pitfalls like:
 - fragmented or run-on sentences,
 - filler words/clauses,
 - singular/plural mismatches,
 - unnecessary nominalizations,
 - illogical links,
 - unclear passive,
 - unclear it/this/which

coherence of paragraph

- o paragraphs have strong beginning (topic sentence) and good ending (conclusions)
- sentences link together (topic threads)

craft

o grammar, punctuation, spelling are flawless

Figures

- o are referred to in text
- o are not overloaded
- o axes are labelled
- o writing is large enough
- o standalone caption (can be understood on its own)