Stat 214 (Spring 2024)

Peter F. Craigmile

Final project description

In groups of 3-4 students, each group will be responsible for producing a 8–10 page report on a statistical data analysis that involves linear regression modeling. You will be responsible for finding the dataset, but I will be happy to help you talk about ideas you may have. A list websites containing datasets can be found on the class website.

1. Make sure that you write down a **scientific question** for your group to answer in your project. Make sure you answer the question using the results of your statistical analysis.

2. Select a dataset with enough cases so you can adequately estimate the different effects in your model. Your response variable must be a quantitative variable (0,1 or categorical variables will not work). Your dataset should have enough explanatory variables to make for an interesting statistical analysis. Make sure to investigate for possible interaction effects.

3. Exploratory data analysis, as well as model building, model selection, and diagnostics must be part of your statistical analysis.

4. You should take time to explain the interpretation of your statistical model and to answer the original scientific question.

5. You may want to include some discussion of your results and ideas for further analysis at the end of the report. If you have references, format them appropriately.

6. You may include R code in an appendix (not counted in the 8–10 page limit), but no R code can be included in the main report. Present your results in figures and tables and make sure to discuss your results in the text of the report.

7. For the report use a 12pt font (like this document).

8. Each student in a group will be assigned the same grade. Please ensure that all students contribute equally in your group – if this is not the case, please contact me.

A grading rubric will be posted on the class website.

Important dates

As soon as possible let me know by email at `peter.craigmile@hunter.cuny.edu` your group members. CC all the members of your group in the email.

Please decide upon your dataset before Homework 9 is due – instructions will be provided in Homework 9.

The report will be **due at 5.30pm on Wec May 22**. Please send your report in PDF format to me at `peter.craigmile@hunter.cuny.edu`, CC'ing all the members of your group in the email.

Write the report using your own words.

Academic misconduct

"Hunter College regards acts of academic dishonesty (e.g., plagiarism, cheating on examinations, obtaining unfair advantage, and falsification of records and official documents) as serious offenses against the values of intellectual honesty. The College is committed to enforcing the CUNY Policy on Academic Integrity and will pursue cases of academic dishonesty according to the Hunter College Academic Integrity Procedures."