

Project description

In groups of 4 students, each group will be responsible for producing a 5–6 page report on a statistical data analysis that involves logistic regression (binary data) or Poisson regression (multicategorical data). You will be responsible for finding the dataset, but I will be happy to help you talk about ideas you may have.

A list of websites containing datasets can be found at Carmen under the “List of websites containing datasets” module.

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 dataset should have enough covariates 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 5–6 page limit), but no R code or R summaries can be included in the main report. For example, present your results in tables and make sure to discuss your results in the text of the report.

7. For the report use a 12pt font with 1.5 spacing (like this document!)
8. Make sure that all students contribute equally in your group. Each student in a group will be assigned the same grade.

I will hand out a grading rubric for the report.

Important dates

Please decide upon your dataset before Homework 5 is due (**Friday, March 6**) – instructions will be provided in Homework 5.

The report will be **due at the start of class on Friday, April 17**. Write the report using your own words.

Academic misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term “academic misconduct” includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct (<http://studentlife.osu.edu/csc/>).