

# DSC 241: Statistical Models

## Spring 2025

### Project guidelines

The purpose of the project is to apply the concepts and methods learned in class in order to solve a practical data analysis problem. The final submission consists of a data analysis report, in addition to auxiliary files, such as computer code. The report should be as thorough and professional as possible within the time and space constraints given.

#### Contents of the report:

1. *Title*: Succinct and informative
2. *Contribution statement*: How the work was distributed between the members of the team.
3. *Problem statement*: Objective of the analysis in the broader context of the data.
4. *Data description*: Data structure, variables being measured and their type, identify sampling mechanism, sample size, response and covariates.
5. *Data analysis*: A clear description of the analysis strategy, analysis steps, graphical depictions and results. Include diagnostics, model selection, etc.
6. *Conclusions*: Interpretation of results in relation to the problem statement.
7. *Appendix*: Auxiliary analyses.
8. *Computer code*: To be submitted as a separate file.

#### Format of the report:

- Length: 10 pages
- 12-point font, 1-inch margins

#### Oral presentation (if relevant):

- Summary of the report
- Length: 10 minutes, 10 slides

#### Evaluation criteria:

- Content, knowledge, logic, validity, thoroughness, interpretation of results
- Clarity, organization, graphics, text composition
- Presentation (if relevant): Speaking, timing, interest from the audience

#### Additional guidelines:

- Make sure to follow the Data Analysis Master page for a complete analysis.
- You may use as much or as little of the project portions of the HW for your analysis. Pick parts that are relevant to your analysis goals. Some rewriting and reduction may be needed to fit the length constraints of the final report.
- The project portions of the HW are limited in scope. You may need to go beyond these in order to achieve a satisfactory final analysis.
- Note from the evaluation criteria above that the report will be evaluated not only in terms of its content and results, but also in terms of its readability.