

## CS 322 Final Project Instructions

This project consists of a presentation and written deliverables. The presentation is worth 20 points, and the written deliverables are worth 80 points.

### 1. Group Work

- You may work individually or in a group of no more than two people.
- Only one submission per group is required.
- List both team members' names on the first slide of your presentation and at the beginning of your report.

### 2. Submission Format

- Place all files in a single folder named exactly as your name appears in NEIUPORT/D2L (e.g., Jessica\_Fatima).
- Zip the folder before uploading.
- Deadline: **December 10, 2025 at noon (prompt)**. There is no grace period.

### 3. Project Requirements

- Choose your own dataset (or use one from the data sets shared with you).
- Ask an interesting statistical question and answer it using regression and hypothesis testing.
- Before running regression, perform preliminary analysis: compute sample means, covariances/correlations, and create visualizations such as a correlation heatmap.
- Use this analysis to understand variable relationships before fitting your model.
- Choose a topic that genuinely interests you; Kaggle is a good source.

### 4. Presentation (20 points)

You are expected to present with a set of slides. This roughly 7-minute presentation covering:

1. Motivation for your research (what and why).
2. How you answered your research question.
3. Your conclusion.

If working in a pair, each member must present their own part. Please upload your presentation slides to the dedicated Google Drive folder. You then can use my laptop to present your work.

### 5. Written Deliverables Uploaded to the designated D2L folder (80 points)

#### A. Report (max 2 pages)

- Written in academic English and fully self-contained.
- Begin with a brief explanation of why your question is interesting, citing reputable sources when appropriate.

- Include explanations, diagrams, and all relevant content from your slides rewritten in prose.
- Do not include code snippets; focus on analysis.

#### B. Supporting Documents

- Include all code files used in your analysis.
- Include the dataset if it is  $\leq 1\text{MB}$ ; otherwise provide a link.
- These materials should allow verification of your results.