

# MATH113/CAIS105: Intro to Data Science

Fall 2023

---

## Mini-Project 04

**Learning Objective:** Teach the class a data science topic

### Part 1

For this project, you will take a turn being the professor. You will divide into three groups and each group will be assigned a topic we've covered in class: joins, pivots, functions. Your task is to come up with a small lecture to explain your topic to the class. You must include the following elements in your lecture:

- A high-level explanation of your topic: What is it used for? Why is it important?
- A general explanation of the basic R code for your topic
- A real-world example of where and how your topic is used in data science. Your example must include:
  - A new dataset we have not used before
  - An analysis question relating to the data
  - An explanation of why your topic is needed to answer the analysis question
  - A demonstration and explanation of the code to answer your analysis question
  - The answer to the analysis question

Your mini-lecture should be 15 – 20 minutes long.

If you used slides for your presentation save them as a PDF to submit on PLATO. If you write on the board, write up your notes clearly and submit those as a PDF on PLATO.

### Submission

Submit your presentation as a group on PLATO.