Project Central

Labs

Lab Instructions	Rubric	Due Date	Topics
Lab 1		01/18	Familiarize yourself with project, explore your research question, and explore the data
Lab 2		02/08	Explore the data, fit a simple linear regression model
Lab 3		02/22	Fit a temporary MLR and practice interpreting coefficient estimates
Lab 4		03/08	Build a model and adapt Lab 3 to interpret coefficient estimates

- Help with BMI variable

Introduction to the project

This project is designed to combine important learning objectives for the class into a deliverable final piece of work. The project will be a poster that summarizes your research question, data, and findings. The poster will be presented at the end of the quarter during our "Poster day".

I have designed 4 labs to scaffold our work and prevent a build-up of work at the end of the quarter. I will guide you through specific analyses, plots, and interpretations that can be used in your final poster. However, not every component of the labs will be directly linked to the poster. That means certain figures may not be important for the poster or you may need to update components of the lab for presentation.

Note that each lab has instructions on this site and a downloadable version. The downloadable version is a cleaner copy of the instructions where you will complete the work. This helps the TAs and I grade labs without sifting through my lengthy instructions (hehe).

The most important learning objectives in this project are:

1. **Understand and communicate your research question**, including its importance and context.
2. **Understand and communicate your analysis process** to an audience with some statistical background.
3. **Fit a linear model using R**
4. **Visualize your findings** so that others can understand your data and results.
5. **Interpret the results of a linear model** in the context of your research question. This involves:
    a. interpretations of specific relationships through coefficient estimates and
    b. interpretations of general trends
6. **Interpret interactions of a linear model**. I write this one separately because it is a more complicated process that is important.
7. **Contextualize your results** and articulate who or what your results represent.

Final Poster

Poster Instructions

Poster due 3/17

Reading and listening sources

If you are interested in sources that discuss the social complexities of anti-fat bias, feel free to take a look at the following sources. **Please be aware that these resources will discuss anti-fat bias and related histories, including racism and sexism.**

- Article: Implicit and explicit anti-fat bias: The role of weight-related attitudes and beliefs
- Podcast: Anti-Fat Bias by Maintenance Phase
- Book: Fearing the Black Body: The Racial Origins of Fat Phobia
    - Multnomah County Library has unlimited loans for the audiobook
- Blog: Dances with Fat
    - You can subscribe to Ragen's weekly newsletter for free

If you have additional sources that you would like to share, please send them to me!

Lab rubric

2 points will be deducted from labs that are late (without an approved extension).

	4 points	3 points	2 points	1 point	0 points
Formatting	Lab submitted on Sakai with `.html` file. Answers are written as asked (bullets or complete sentences) with no major grammatical nor spelling errors. With little editing, the answer can be incorporated into the project poster.	Lab submitted on Sakai with `.html` file. Answers are written as asked (bullets or complete sentences) with grammatical or spelling errors. With editing, the answer can be incorporated into the project report.	Lab submitted on Sakai with `.html` file. Answers are written as asked (bullets or complete sentences) with major grammatical or spelling errors. With major editing, the answer can be incorporated into the project report.	Lab submitted on Sakai with `.html` file. Answers are not written as asked.	Lab *not* submitted on Sakai with `.html` file.
Code/Work*	All tasks are directly followed or answered. This includes all the needed code, in code chunks, with the requested output.	All tasks are directly followed or answered. This includes all the needed code, in code chunks, with the requested output. In a few tasks, the code syntax or output is not quite right.	Some tasks are directly followed or answered. This includes all the needed code, in code chunks, with the requested output.	Some tasks are directly followed or an-swered.This includes all the needed code, in code chunks, with the requested output. In a few tasks, the code syntax or output is not quite right.	More than a quarter of the tasks are not completed properly.

	4 points	3 points	2 points	1 point	0 points
Reasoning**	Answers demonstrate understanding of research context and investigation of the data. Answers are thoughtful and can be easily integrated into the final report.	Answers demonstrate understanding of research context and investigation of the data. Answers are thoughtful, but lack the clarity needed to easily integrate into the final report.	Answers demonstrate some understanding of research context and investigation of the data. Answers are fairly thoughtful, but lack connection to the research.	Answers demonstrate some understanding of research context and investigation of the data. Answers seem rushed and with minimal thought.	Answers lack understanding of research context and investigation of the data. Answers seem rushed and without thought.

*While there is not a large emphasis on "correctness" in the labs, you must follow the correct procedure for certain tasks. The code/work grade will reflect whether or not you followed the procedure for analysis correctly.

**Applies to questions with reasoning (like target population, choosing variables, revisiting research question)