STAT 1661/2660: Linear Regression

Fall 2025

Summary: This course served as an introduction to linear regression. The topics covered include fitting a straight line, examination of residuals, regression with two independent variables, polynomial models, model selection, and model building.

Lecture Time and Place: M, W 9:30am - 10:45am in 106 Lawrence Hall.

Instructor: Chris McKennan, Assistant Professor, Department of Statistics, chm195@pitt.edu.

Office hours: M, W 1:00pm - 2:00pm in my office (1814 W. Posvar Hall).

Teaching assistant: Weiqiong Huang, PhD candidate, Department of Statistics, weh65@pitt.edu.

Office hours: Tuesdays 11am-12pm in 1825 W. Posvar Hall.

Text: There is no required textbook for this course. I have listed some references below that you may find useful (these can be found on Canvas).

References: Applied Linear Regression, 3$^{\text{rd}}$ edition, by Sanford Weisberg.

Linear Models with R, by Julian Faraway.

Grade: The final grade will be computed from homework (30%), the midterm (35%), and the final (35%).

- Homework: Homework assignments will be assigned weekly. They consist of problems from the text, supplemental problems, and case studies. You must do all homework problems on your own, although you may discuss the problems with other students. Assignments must be turned in on time for credit.
- In-class midterm: The midterm will be in class on **Monday, October 20**.
- Final: TBD.

Special accommodation: If you have a disability for which you may be requesting an accommodation, you are encouraged to contact both me and Disability Resources and Services (DRS), as early as possible in the term.

Some topics to review if you need a refresher:

- Expectation, variance, and higher order moments.
- Basic calculus (differentiation, integration, etc).
- Properties of the normal distribution.