Course Overview and Syllabus: Math 3350, Fall 2025

Course Website: https://jeswheel.github.io/3350_f25

Instructor Information

Jesse Wheeler
Mathematics and Statistics Department
Email: jessewheeler@isu.edu
Office: PS 314C
Office Hours:

- TBD

You can contact me during office hours or via Email. I will try my best to respond to questions within 24 hours during Mon-Fri. Feel free to email me over the weekends, but I may not be actively monitoring my emails during these times.

Course Description

A calculus-based introduction to statistical procedures, including simple regression, basic experimental design, and non-parametric methods. PREREQ: MATH 1160 or MATH 1170.

Course Format

This is a standard class where we will meet in-person. Course materials, activities, and assignments will be posted on Canvas.
General course information can be found at the course website: `https://jeswheel.github.io/3350_f25`

Textbook and Course Materials

Baldi, Brigitte, and David S. Moore. *The practice of statistics in the life sciences*. Freeman, 2012. ISBN: 9781319403348.

Software

This semester we will use the R programming language; for the purpose of our class, think of this software as a special calculator used for Statistics. To interact with this software, I highly recommend using RStudio, an Integrated Development Environment (IDE) built for writing R code.

Why R? R and RStudio are both free, and widely used software in both academia and industry. R has been built specifically to help practicioners do statistics easily.

- Installing R: https://cran.r-project.org/
- Installing RStudio: https://posit.co/download/rstudio-desktop/. Note that you should install R prior to installing RStudio.

Grading

Grade	Percentage Range
Participation Quizes	5%
Homework	50%
Midterm	15%
Final	30%

Table 1: Assignment Weights

Grade	Percentage Range
A	93–100
A-	90–92.99
B+	87–89.99
B	83–86.99
B-	80–82.99
C+	77–79.99
C	73–76.99
C-	70–72.99
D+	67–69.99
D	65–66.99
D-	60–64.99
F	0–54.99

Table 2: Grade Breakdown

Schedule (Tentative)

The table below provides a tentative schedule of the course. This table will be updated on the course website as needed.

Week	Dates (MWF)	Textbook Chapters	Topic
1	Aug 25, 27, 29	Chapter 1, 2	Graphs and Summaries
2	Sep ~~1~~, 3, 5	Chapter 3	Scatterplots and Correlation
3	Sep 8, 10, 12	Chapter 4	Regression
4	Sep 15, 17, 19	Chapter 5	Two-Way Tables
5	Sep 22, 24, 26	Chapter 6, 7	Samples vs Experiments
6	Sep 29, Oct 1, 3	Chapter 9	Probability
7	Oct 6, 8, 10	Chapter 10	Independence
8	Oct 13, 15, **17**	Chapter 11, 12	Common Distributions
9	Oct 20, 22, 24	Chapter 13	Sampling Distributions
10	Oct 27, 29, 31	Chapter 14	Inference
11	Nov 3, 5, 7	Chapter 15	Inference in Practice
12	Nov 10, 12, 14	Chapter 17-18	Inference for Population Mean
13	Nov 17, 19, 21	Chapter 18-19	Inference for Proportions
14	Nov 24, 26, 28	Fall Break - No Classes	
15	Dec 1, 3, 5	Chapter 20	Comparing Proportions
16	Dec 8, 10, 12	Chapters 21-23	Additional Topics
17	Dec 15–19	Finals Week (Dec 17)	

For other important dates and deadlines, please see the University academic calendar: `https://www.isu.edu/academiccalendar/`.

Exams

- **Final Exam**: Wednesday, Dec 17, 7:30-9:30 a.m. (Sorry about the time, I didn't chose this). The location will be our regular classroom.
- **Midterm**: Planned for **Oct 17**, during regular class time. Tentatively, the midterm will cover Chapters 1-10.