STA 131B: Welcome!

Introduction to this course and Mathematical Statistics

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INTRODUCTION

- ▶ Instructor: Hang Zhou
  - Office hour: Mon 4:10-5:10pm @ 4229 MSB
  - Email: hgzhou@ucdaivs.edu
  - Lectures: M W F, 3:10-4pm @ Wellman Hall 216

- ▶ TA: Jedidiah Harwood
  - Office hour: Tu 10:00-12:00 @ MSB 1117 (the TA office)
  - Email: jedharwood@ucdavis.edu
  - Discussion: R, 2:10-3pm @ Olson Hall 205

- ▶ Website: https://hg-zh.github.io/teaching/STA131B2024S
  - You can download the class material on it!

- ▶ Recommended Textbook: (not necessary for that class)
  Probability and Statistics, 4th Edition, by Morris DeGroot and Mark
  Schervish, Addison and Wesley, ISBN-13: 978-0321500465

GRADING

Homework	Midterm 1	Midterm 2	Final
20%	20%	20%	40%

- ▶ Weekly homework: 20%

- ▶ Midterm 1 (April 22): 20%

- ▶ Midterm 2 (May 15): 20%

- ▶ Final: Jun 10 (Mon): 40%

HOMEWORK

- ► There will be weekly assignments posted on canvas and course website.

- ► The HW will be due **Mondays at 4pm**.

- ► Solutions will be discussed in the discussion sections on Thursday.

- ► **Late HW will not be accepted!**

Homework is important!!!

Feel free to share your experience with me regarding the HW. How much time you spend weekly? Too easy/Too hard?

EXAMS

Midterm 1
- ► In Class (April 22).
- ► Scope: Introduction, **MLE**, **Method of Moments**, Bayesian Method.

Midterm 2
- ► In Class (May15).
- ► Scope: **Sufficient Statistics**, **Properties of Estimators**.

Final
- ► Jun 10 (Mon) 3:30-5:30pm.
- ► Scope: **Fisher Information** and Efficient Estimation, **Sampling Distribution**, Confidence Intervals, Large Sample Properties of Estimators (if time permitted).

There will be a review lecture before each exam.

COMMUNICATION

We will use **Canvas** and **Gradescope**.

▶ All class materials, notes, assignments and zoom recordings will be posted on **Canvas**, and the homework are graded on **Gradescope**.

▶ The lecture notes will be posted one day before the lectures.

▶ Homework will be posted on both Canvas and the course website (https://hg-zh.github.io/teaching/STA131B2024S) before Wednesday.

▶ Free feel to contact me by email at anytime. I will reply you in 1 weekday. If not, feel free send me a reminder.

Q&A

▶ Q: What if I miss the midterm(s)?
A: Students missing the midterms can use their **next** midterm or final exam grades as their midterm grade.
E.g. If Student A misses his Midterm 1, then his final grade will be 20% HW + 40% Midterm 2 + 40% Final.
E.g. If student B misses his Midterm 2, then his final grade will be 20% HW + 20% Midterm 1 + 60 % Final
E.g. If student C misses both Midterm 1&2, then his final grade will be 20% HW + 80 % Final

▶ Q: What if I miss the final?
A: You need to take an oral exam instead.

▶ Q: What is difficulty levels of each exam.
A: Generally speaking, the difficulty levels are ranked as

$$\text{Mid } 1 < \text{Mid } 2 < \text{Final} < \text{Oral final}$$