#### Math 408 Schedule, Spring 2024

# General features:

- 12 homeworks (due on Thursdays): 10% total;
- 12 quizzes: 10% total;
- 2 computer projects (due FRIDAY, MARCH 8 and FRIDAY, APRIL 19): 10% total (5% each);
- 2 midterms (MARCH 4 AND APRIL 15, BOTH MONDAYS): 30% total (15% each);
- 1 experimental project (Due FRIDAY, APRIL 26): 10%.
- Final exam (Wednesday, May 1, 11am–1pm): 30%.

# Quizzes and exams are your individual effort; for homeworks and projects, you are welcome to use any help whatsoever.

**About Quizzes:** Most quizzes are on Tuesdays, starting with week 2. On exam weeks, the quiz will consist of a problem from the exam you had the day before. There will be two special quizzes on Thursdays the week before each midterm exam.

# Weekly schedule

# Week 1.

Main topics: Review of probability and descriptive statistics. Chapters in the book: 1–7. Important date: January 11 (HW1 is due).

#### Week 2

Main topic: Estimation.

Chapter in the book: 8.

Important dates: January 15 (MLK Day, no class), January 16 (Quiz 1, on probability), January 18 (HW 2 is due).

# Week 3

Main topic: Estimation. Chapters in the book: 8,9. Important dates: January 23 (Quiz 2, on estimation), January 25 (HW 3 is due), January 26 (Last day to drop **without** a "W" and **with** refund).

#### Week 4

Main topic: Estimation. Chapter in the book: 9. Important dates: January 30 (Quiz 3, on estimation), February 1 (HW 4 is due).

# Week 5

Main topic: Hypothesis testing. Chapter in the book: 10. Important dates: February 6 (Quiz 4, on estimation), February 8 (HW 5 is due).

#### Week 6

Main topic: Hypothesis testing. Chapter in the book: 10. Important dates: February 13 (Quiz 5, on hypothesis testing), February 15 (HW 6 is due).

#### Week 7

Main topic: Linear models.

Chapter in the book: 11.

Important dates: February 19 (Presidents Day, no class),

February 20 (Quiz 6, on hypothesis testing),

February 22 (HW 7 is due), February 23 (Last day to drop **without** a "W" but **without** refund).

# Week 8

Main topic: Linear models. Chapter in the book: 11. Important date: February 29 (Quiz 7, to prepare for Exam 1; HW 8 is due).

# Week 9

Main topics: Exam 1; Design of experiment. Chapters in the book: 8–11, 12. Important dates: March 4 (Exam 1), March 5 (Quiz 8, on Exam 1), March 8 (Computer Project 1 is due).

# Week 10

Main topic: Analysis of variance. Chapter in the book: 13. Important date: March 21 (HW 9 is due), No quiz this week.

#### Week 11

Main topic: Categorical data and  $\chi^2$  test. Chapter in the book: 14. Important dates: March 26 (Quiz 9, on ANOVA), March 28 (HW 10 is due).

#### Week 12

Main topic: Nonparametric methods. Chapter in the book: 15. Important dates: April 2 (Quiz 10, on  $\chi^2$  test), April 4 (HW 11 is due), April 5 (last day to drop **with** a "W").

#### Week 13

Main topic: Baeysian statistics. Chapter in the book: 16. Important date: April 11 (Quiz 11, to prepare for Exam 2; HW 12 is due).

#### Week 14

Main topic: Exam 2. Chapter in the book: 12–16. Important dates: April 15 (Exam 2), April 16 (Quiz 12, on Exam 2), April 19 (Computer Project 2 is due).

# Week 15

Main topic: final review. Chapters in the book: 8–16. Important date: April 26 (Experimental Project is due). No quiz, and no HW due this week.

#### Final exam is Wednesday, May 1, 11am–1pm, in the regular lecture room.