Stat 4201: Introduction to Mathematical Statistics

Course Syllabus, Spring 2018

Instructor: Yuan Zhang

Email: zhang.7824@osu.edu Office: 229 Cockins Hall

Office hours: M 4–5pm, F 4–5pm, and by appointment (at least 48 hours in advance).

Grader: He will grade your homework:

Jianhao Zhang

Email: zhang.4487@osu.edu

TA: They will teach the recitations:

Bo Luan

Email: luan.49@osu.edu

Amartya Ghosh

Email: ghosh.147@osu.edu

Tutoring hours: Luan: Thursday 12:40-2:50 pm at Cockins Hall 134; Ghosh: Tuesday and Thursday 1:50-2:50pm at Cockins Hall 134

Lecture: MWF 3:00-3:55pm in Jennings Hall 155

Recitations: There will be no recitations in the first week of class. It is important that you attend your recitation section. Recitations will be used to discuss examples, work on problems and answer questions about the homework.

- Section 1225: We 11:30AM-12:25PM in Boltz Hall 422 (Ghosh)
- Section 1226: We 12:40PM-1:35PM in Scott Lab N054 (Ghosh)
- Section 1229: We 4:10PM-5:05PM in Caldwell Lab 137 (Luan)
- Section 1331: We 5:20PM-6:15PM in Cockins Hall 218 (Luan)

Course webpage: On Carmen: carmen.osu.edu.

Textbook: (Required) John E. Freund's Mathematical Statistics with Applications (7th or 8th edition) by I. Miller and M. Miller, Pearson, 2014.)

Content

This is the first course in a two semester sequence on probability and mathematical statistics. The focus will be on introducing some of the basic concepts in probability, including probability spaces, discrete and continuous distributions and densities, expectation, functions of random variables and transformation techniques, sampling distributions, and order statistics.

Homework (10%)

Homework assignments will be posted on a regular basis. Only part of the homework will be graded, but all questions can be important for exams. Solutions will be posted shortly after the due date of each homework. Homework should be submitted at the beginning of the lecture on its due date. No late homework accepted.

Exams (25% Midterm 1 + 25% Midterm 2 + 40% Final)

There will be two midterm exams, scheduled on **Friday, February 9** and **Friday, March 9**. Both exams are in-class and closed book. You may use one piece of cheat sheet (double-sided, US letter size) for Exam 1 and two pieces of cheat sheets (double-sided, US letter size) for Exam 2.

The final exam will be comprehensive and is on Friday, April 27 at 4:00–5:45pm. You may use three pieces of cheat sheets (double-sided, US letter size) for Final Exam.

For policies on excusing exams, see the first lecture note.

Ethics

All students are expected to adhere to the Ohio State University code of conduct:

trustees.osu.edu/rules/code-of-student-conduct/

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487).

You are encouraged to discuss the homework assignments with your classmates and both offer and receive advice. For quizzes, midterm exams and the final exam, you must work completely independently.

Special Accommodations

Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; www.ods.ohio-state.edu/.