STAT:4100:0002 Section 0002

Mathematical Statistics Fall 2021

Meeting Time. MWF 4:30–5:20 p.m., 14 SH

Instructor. Lan Luo, 205 SH, 206-384-6535, lan-luo@uiowa.edu Office Hours. MWF 5:30 p.m.-6:20 p.m., or by appointment

Zoom link: https://uiowa.zoom.us/j/3366988130

Course Website. I will post announcements, homework problems, quizzes, lecture notes, and other course information in ICON http://icon.uiowa.edu.

Course Description and Objectives. This is a course in mathematical statistics intended for upper-level undergraduate students in mathematical sciences as well as for graduate students in all disciplines. The goal is to provide a solid foundation in theory of random variables and probability distributions.

Prerequisites. The course prerequisites are the mathematics courses MATH:2700 and MATH:2850.

Textbook. Introduction to Mathematical Statistics (8th ed.) Hogg, McKean and Craig, (Prentice Hall). We will cover chapters 1 to 3 and part of chapter 4.

Grading. Your semester grade will consist of the following components:

Homework	20%	10 highest out of 12
Quizzes	20%	4 highest out of 6
Midterm Exam	30%	October 13 (in class, tentative)
Final Exam	30%	Dec 13-17, TBD by the University
Total	100%	

As a **rough** guide, A+,A,A=90%-100%, B+,B,B=80%-90%, C+,C,C=70%-80%, D+,D,D=60%-70%.

Homework, Quizzes and Exams. Discussions on homework problems are encouraged during office hours, but I will not check whether your final answers are correct. Homework assignments are due on Wednesdays at 4:30 p.m. A 20-minute quiz will be given in class biweekly on Fridays. The first one will be on September 10. All exams will allow one-page cheat sheet (letter size, two-sided), but you are not supposed to discuss with others. Late submission is not allowed.

Email policy. When emailing about this course, please put "STAT4100" into the subject line. Emails to the instructor or TA could be organizational issues, such as requests for appointments, questions about course organization, etc. In general, discussion on technical issues over email is lack of efficiency, and we strongly encourage to solve those problems during office hours. Technical issues are questions concerning how to approach a particular problem, or whether a particular solution is correct.

Attendance is required.

Dept. of Statistics and Actuarial Science 241 SH, http://www.stat.uiowa.edu Prof. Chan, DEO, kung-sik-chan@uiowa.edu

College of Liberal Arts and Sciences: Policies and Procedures

Attendance and Classroom Expectations Students are responsible for attending class and for knowing an instructor's attendance policies, which vary by course and content area. All students are expected to attend class and to contribute to its learning environment. Students are also expected to comply with University policies and directives regarding appropriate classroom behavior or other matters. Students also have the right to be evaluated solely on their academic achievement and the fulfillment of related requirements.

Absences Students are responsible for communicating with instructors as soon they know that an absence might occur or as soon as possible in the case of an illness. Students may use the CLAS absence form to aid in communication with instructors who will decide if the absence is excused or unexcused; the form is located on ICON within the top banner under "Student Tools." Delays in communication could result in a forfeit of what otherwise might be an excused absence.

Absences: Illness, Unavoidable Circumstances, and University Sponsored Activities Students who are ill, in an unavoidable circumstance affecting academic work, or who miss class because of a University sponsored activity are allowed by UI policy to make up a missed exam. Documentation is required by the instructor except in the case of a brief illness. Students are responsible for communicating with instructors as soon as the absence is known.

Absences: Holy Days Reasonable accommodations are allowed for students whose religious holy days coincide with their classroom assignments, tests, and attendance if the student notifies the instructor in writing of any such religious Holy Day conflicts within the first days of the semester and no later than the third week. (See the University Operations Manual: https://opsmanual.uiowa.edu/students/absences-class#8.2).

Absences: Military Service Obligations Students absent from class due to U.S. veteran or U.S. military service obligations (including military service-related medical appointments, military orders, and National Guard Service obligations) must be excused without penalty. Instructors must make reasonable accommodations to allow students to make-up exams or other work. Students must communicate with their instructors about the expected possibility of missing class as soon as possible. (For more information, see https://opsmanual.uiowa.edu/iv-8-absences-class%C2%A0-0).

Academic Misconduct All undergraduates enrolled in courses offered by CLAS have in essence agreed to the College's Code of Academic Honesty. Academic misconduct affects a student's grade and is reported to the College which applies an additional sanction, such as suspension. Outcomes about misconduct are communicated through UI email

(https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).

Academic Accommodations for Students with Disabilities UI is committed to providing an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as a mental health, attention, learning, vision, and a physical or health-related condition) through the Student Disability Services (SDS) office. The student is responsible for discussing specific accommodations with the instructor. Note that accommodations

are not granted retroactively but from the time of the student's request to the instructor onward; additionally, accommodations must be requested at least two weeks in advance of the related assignment or exam (https://sds.studentlife.uiowa.edu/).

Class Recordings: Privacy and Sharing Course lectures and discussions are sometimes recorded or live-streamed. These are only available to students registered for the course and the intellectual property of the faculty member. These materials may not be shared or reproduced without the explicit written consent of the instructors. Students may not share these recordings with those who are not enrolled in the course; likewise, students may not upload recordings to any other online environment. Doing so is a breach of the Code of Student Conduct and could be a violation of the Federal Education Rights and Privacy Act (FERPA); also see https://dos.uiowa.edu/policies/code-of-student-life/.

Communication: UI Email Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community (Operations Manual, III.15.2). Emails should be respectful and brief, with complex matters addressed during the instructor's drop-in hours, for example. Faculty are not expected to answer email after business hours or during the weekends.

Communication: Free Expression The University of Iowa supports and upholds the First Amendment protection of freedom of speech and the principle of academic freedom to foster a learning environment where open inquiry and the vigorous debate of a diversity of ideas are encouraged. Students will not be penalized for the content or viewpoints of their speech if student expression in a class context is germane to the subject matter of the class and is conveyed in an appropriate manner. To learn more, visit https://freespeech.uiowa.edu/.

Complaints about Academic Matters Students with a complaint about a grade or a related academic matter should first visit with the instructor and then with the course supervisor if one is assigned, and finally with the Chair of the department or program offering the course. Students may next bring the issue if not resolved to the College of Liberal Arts and Sciences. See https://clas.uiowa.edu/students/handbook/student-rights-responsibilities.

Final Examination Policies The final exam schedule is published during the fifth week of the fall and spring semesters or on the first day of summer classes; students are responsible for knowing the date, time, and place of their final exams. Students should not make travel plans until knowing this information. A student with exams scheduled on the same day and time or who have more than two final exams on the same day should visit this page for how to resolve these problems by the given deadline: https://registrar.uiowa.edu/makeup-final-examination-policies. No exams are allowed the week before finals, but with some exceptions made for labs, language courses, and off-cycle courses (https://registrar.uiowa.edu/final-examination-scheduling-policies).

Home of the Course The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the courses add and drop deadlines, the "second-grade only" option (SG0), and other undergraduate policies and procedures. Different UI colleges may have other policies or deadlines. See https://clas.uiowa.edu/students/handbook. Questions? Contact CLAS at clasps@uiowa.edu or 319-335-2633.

Mental Health Students are encouraged to seek help as a preventive measure or if feeling stressed or overwhelmed. Students should talk to their instructors for guidance with specific class-related concerns and are encouraged to contact University Counseling Service (UCS) at 319-

335-7294 during regular business hours to schedule an appointment. USC offers group and individual therapy as well as counseling for couples about relationships while making referrals to other resources (https://counseling.uiowa.edu/). Student Health can also address related concerns (https://studenthealth.uiowa.edu/). These visits are free to students. After hours, students are encouraged to call the Johnson County Community Crisis Line at (319) 351-0140 or dial 911 in an emergency.

Nondiscrimination in the Classroom The University of Iowa is committed to making the classroom a respectful and inclusive space for people of all gender, sexual, racial, religious, and other identities. Toward this goal, students are invited in MyUI to optionally share the names and pronouns they would like their instructors and advisors to use to address them. The University of Iowa prohibits discrimination and harassment against individuals based on race, class, gender, sexual orientation, national origin, and other identity categories indicated by the University's Human Rights policy. For more information, contact the Office of Equal Opportunity and Diversity at https://diversity.uiowa.edu/division/office-equal-opportunity-and-diversity-eod.

Sexual Harassment Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff; all members of the UI community are expected to conduct themselves in a manner that maintains an environment free from sexual harassment and sexual misconduct. Those experiencing sexual harassment are strongly encouraged to report the incidents and to seek help (https://osmrc.uiowa.edu/).