STAT:3100 Introduction to Mathematical Statistics I
Section 0001 Fall 2022

Lectures	MWF 10:30 a.m.– 11:20 a.m., 140 Schaeffer Hall
Instructor	Dr. Aixin Tan, 259 SH, 335-0821, `aixin-tan@uiowa.edu`
Dr. Tan's Office Hours	MWF 11:20 a.m.–12:10 p.m. Students are invited to drop by my office during these hours to discuss questions about the course material or concerns. I am also available by appointment (zoom).
Questions by email	You are always welcome to email me questions. Mention STAT:3100 in the email title and I'll usually reply within a day.
Assistant/Grader	Roya Bagherzadeh, 257 SH, `roya-bagherzadeh@uiowa.edu`
Roya's Office Hours	M 3:30-5:30pm 257 SH. and Thur 9-10am via zoom. (Log into ICON, click Zoom in the left column for Thur office hours.)

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

Course Home. The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the add and drop deadlines, the "second-grade only" option (SGO), academic misconduct policies, and other undergraduate policies and procedures. Other UI colleges may have different policies.
The Course Home Department is Statistics and Actuarial Science, 241 SH.
DEO: Dr. Kung-Sik Chan, 241 SH, 335-0712, kung-sik-chan@uiowa.edu

Course Description and Learning Objectives. The goal of this course is to introduce the theory of random variables and probability distributions, and to show some of their applications in everyday life. Concepts, calculations, and derivations will be emphasized. We will cover most sections of Chapters 1–5 of the textbook.

Prerequisites. The course prerequisites are the mathematics courses MATH:1860 or MATH:1560, or equivalents: undergraduate calculus.

Textbook. Hogg, Tanis, and Zimmerman (2018). Probability and Statistical Inference, 10th ed, Pearson.

Additional Resource. Durrett (2021 Beta test version). Elementary Probability for Applications. Freely available at `https://services.math.duke.edu/~rtd/EP4A/EP4A_April2021.pdf`.

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

Homework	12%	
Quizzes	10%	
Midterm Exam 1	23%	week of Sep. 26 (tentative)
Midterm Exam 2	23%	week of Nov. 7 (tentative)
Final Exam	32%	week of Dec. 12 (to be determined by the University in October)
Total	100%	

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

Quizzes and Exams. Quizzes (some given in class, some on-line via ICON) and Exams (in class) will emphasize examples, key concepts and techniques that are repeatedly mentioned in class,
as well as those encountered in homework problems. All in class tests will be closed book. The final exam will be comprehensive.

Makeup policy for Quizzes and Exams. In case of illness or emergency, contact the instructor in person or by email **prior** to the exam or quiz. Each case will be reviewed individually.

Homework. Generally, homework will be assigned every Friday in ICON, and due in ICON the next Friday **before class starts**. The deadline will be clearly shown in ICON/Assignment. **Please write clearly and upload a single file of scan/picture of your work in ICON/Assignment.** Homework submissions up to 24 hours late will receive a 10% penalty, those between 24 and 48 hours late a 20% penalty, and those between 48 and 72 hours late a 30% penalty. **A Homework submission that is more than 72 hours late receives a score of zero unless** the delay is due to "illness, mandatory religious obligations, or other unavoidable circumstances or University activities" that were communicated to the instructor **prior to the original deadline**. Homework solutions will be posted in ICON a few days after the due dates.
Each week, the grader will randomly pick a subset of the assigned problems, and your homework grades solely depend on your solution to the randomly picked problems. So it is important that you attempt all the assigned problems. Note, there will be no homework assignments that give "bonus credit" to individual students to help their grade. However, **the lowest two homework scores will be dropped**, meant to cover all unexpected emergent situations.
Unless stated otherwise, **to receive full credit, show your work when solving homework problems instead of just present a numerical result.** You are encouraged to discuss and study with others. But **the submitted work must reflect your own effort**. If you do discuss with others on homework assignments, please: (a) write up your own assignment and make sure you completely understand all solutions that you submit, and (b) write the names of the others in your study group on your assignment.

Attendance is required. Attendance and Absence Policies

Academic Honesty and Misconduct All students in CLAS courses are expected to abide by the CLAS Code of Academic Honesty.

Student Complaints Students with a complaint about a grade or a related matter should first discuss the situation with the instructor, and finally with the Director or Chair of the school, department, or program offering the course.
Undergraduate students should contact CLAS Undergraduate Programs for support when the matter is not resolved at the previous level. Graduate students should contact the CLAS Associate Dean for Graduate Education and Outreach and Engagement when additional support is needed.

Drop Deadline for this Course You may drop an individual course before the deadline (Sep 2, 2022, for this course); after this deadline you will need collegiate approval. You can look up the details in drop deadline for this course here . When you drop a course, a "W" will appear on your transcript. The mark of "W" is a neutral mark that does not affect your GPA. Directions for adding or dropping a course and other registration changes can be found on the Registrar's website. Undergraduate students can find policies on dropping and withdrawing here. Graduate students should adhere to the academic deadlines and policies set by the Graduate College.

University Policies

Accommodations for Students with Disabilities

https://provost.uiowa.edu/teaching-resources/course-syllabi-information#accommodations-for-students-with-disabilities

Basic Needs and Support for Students

https://provost.uiowa.edu/teaching-resources/course-syllabi-information#basic-needs-and-support-for-students

Classroom Expectations https://provost.uiowa.edu/teaching-resources/course-syllabi-information#classroom-expectations

Exam Make-up Owing to Absence https://opsmanual.uiowa.edu/students/absences-class#8.1

Free Speech and Expression https://provost.uiowa.edu/teaching-resources/course-syllabi-information#free-speech-and-expression

Mental Health https://provost.uiowa.edu/teaching-resources/course-syllabi-information#mental-health

Military Service Obligations https://opsmanual.uiowa.edu/students/absences-class#8.2

Non-discrimination https://provost.uiowa.edu/teaching-resources/course-syllabi-information#non-discrimination-statement

Religious Holy Days https://opsmanual.uiowa.edu/students/absences-class#8.3

Sexual Harassment/Misconduct and Supportive Measures

https://provost.uiowa.edu/teaching-resources/course-syllabi-information#sexual-harassment--sexual-misconduct-and-supportive-measures

Sharing of Class Recordings https://provost.uiowa.edu/teaching-resources/course-syllabi-information#sharing-of-class-recordings-if-appropriate