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

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

Online Instruction. The course will be delivered online through zoom. The link is available on ICON. The course is synchronous from 8:30 AM to 9:20 AM MWF. Please mute yourself and don’t turn on the videos to ensure the Internet connection is stable. You are encouraged to ask questions during the lecture. To promote the interaction, you are required to turn on the video unless the Internet is unstable.

Prerequisites. The course prerequisites are the mathematics courses MATH:2700(22M:027) and MATH:2850(22M:028), or equivalents: undergraduate calculus including linear algebra.

Textbook. Introduction to Mathematical Statistics (7th ed.) Hogg, McKeen and Craig, (Prentice Hall). We will cover chapters 1-3 and part of chapter 4. The 8th edition is also acceptable but homework will be assigned based on the 7th edition.

Software. The software R will be used in this class to produce graphs and conduct small simulations to corroborate theoretical results.

R can be freely downloaded at [https://mirror.las.iastate.edu/CRAN](https://mirror.las.iastate.edu/CRAN).

Office Hours. The office hours are held 8-11 am every Thursday. Reserve your slot using the following google sheet and send me a zoom link before the scheduled time. [https://docs.google.com/spreadsheets/d/1MxnkTpgPK9PwChutJfGHZt2R1nYKuy2-t3XqEdsFXxA/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1MxnkTpgPK9PwChutJfGHZt2R1nYKuy2-t3XqEdsFXxA/edit?usp=sharing)

To protect your privacy, you are free to use a nickname to reserve the office hours. You
can reserve consecutive slots if you need more than 15 minutes. You are encouraged to visit the office hours in group.

**Homework.** Homework is weekly and due 8:30 AM every Friday. No late homework is accepted. To avoid grading penalty, place a box around each final numerical answer, show all important steps in your reasoning. The homework will be graded based on a three-point scale.

If you write your homework by hand, take pictures or preferably scan your homework, and **must combine them into a single PDF**. The homework won’t be graded if it is submitted in formats other than PDF. If multiple files are submitted, only the first file will be graded.

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

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<thead>
<tr>
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<th>Percentage</th>
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<tbody>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Weekly Quizzes</td>
<td>45%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>35% Oct 28</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
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As a rough guide, A,A- = 90% − 100%, B+,B,B- = 80% − 90%, C+,C,C- = 70% − 80%, D+,D,D- = 60% − 70%. The lowest homework will be dropped.

**Quizzes and Exams.** There will be weekly 20-minute quizzes and one midterm. All the quizzes and midterm are online and the answer should be electronically submitted through ICON. The quizzes and exam are open book, but you may discuss the quizzes or the exam only with the instructor or the TA. You are responsible to check emails in the middle of the quizzes and exam in case there are some updates on the questions.

The quizzes will be held on most Mondays from 8:30 AM to 8:50 AM. The grades will be 30% off if the exam is submitted late but before 9:00 AM. No submission will be accepted after 9:00 AM. You are allowed to drop two lowest quizzes. No make up quiz will be given.

The midterm will be held online from 6:30 PM to 8:30 PM on Oct 28. The grade will be 30% off if the exam is submitted late but before 9:00 PM. No submission will be accepted after 9:00 PM. You are responsible for reliable internet connection.

If you write your quiz or exam by hand, take pictures or preferably scan your quiz or exam, and **must combine them into a single PDF**. The quiz or exam won’t be graded if it is submitted in formats other than PDF. If multiple files are submitted, only the first file will be graded.

Students must take exams as scheduled except in cases of officially university-approved absence such as class conflict with official exam time, illness, religious observance, and NCAA athletic competition. Makeup exams are not available for other reasons.
including student org field trips, club competitions, job interviews, and personal events.

A student who is absent for more than five days or miss an exam due to an emergency or an illness may request the UI Service Center, 17 Calvin Hall, registrar@uiowa.edu, to notify me of the reason for the absence.

“Incomplete” Grades. A grade of “Incomplete” will only be given under extraordi-
narily extenuating circumstances that prevent the student from completing the course requirements. Having a failing grade in the course is not an extraordinarily extenuating circumstance.

Copyright. The lectures, slides, homework, quiz and exam questions are for use only by students attending STAT 4100 (0001). It is illegal to share with anyone else the course materials without instructor’s permission.

Prof. Kung-Sik Chan, DEO, 335-0712, kung-sik-chan@uiowa.edu
Administrative Home of the Course The College of Liberal Arts and Sciences (CLAS) is the administrative home of this course and governs its add/drop deadlines, the second-grade-only option, and related policies. Other colleges may have different policies. CLAS policies may be found here: https://clas.uiowa.edu/students/handbook.

Class Behavioral Expectations. Students are expected to comply with University policies regarding appropriate classroom behavior as outlined in the Code of Student Life. This includes the policies and procedures that all students have agreed to regarding the Steps Forward for Fall 2020 in response to the COVID-19 pandemic. Particularly, all students are required to wear a face covering when in a UI building, including a classroom. In addition, the density of seats in classrooms has been reduced; in some instances, this will allow 6 feet or more between students while other cases, it may be less. Regardless, wearing a face covering and maintaining as much distance as possible are vital to slowing the spread of COVID-19. In the event that a student disrupts the classroom environment through their failure to comply with the reasonable directive of an instructor or the University, the instructor has the authority to ask that the student immediately leave the space for the remainder of the class period. Additionally, the instructor is asked to report the incident to the Office of Student Accountability for the possibility of additional follow-up. Students who need a temporary alternative learning arrangement related to COVID-19 expectations should contact Student Disability Services (https://sds.studentlife.uiowa.edu/fall-2020/covid-19-temporary-learning-arrangements/; +1 319 335-1462).

Class Recordings: Privacy and Sharing. Some sessions of a course could be recorded or live-streamed. Such a recording or streaming will only be available to students registered for the course. These recordings are the intellectual property of the faculty, and they may not be shared or reproduced without the explicit written consent of the faculty member. Students may not share these sessions with those not in the class; likewise, students may not upload recordings to any other online environment. Doing so is a breach of the Code of Student Conduct and, in some cases, a violation of the Federal Education Rights and Privacy Act (FERPA).

Communication and the Required Use of UI Email Students are responsible for official correspondences sent to their UI email address (uiowa.edu) and must use this address for all communication within UI (Operations Manual, III.15.2).

Complaints Students with a complaint about an academic issue should first visit with the instructor or course supervisor and then with the Chair of the department or program offering the course; students may next bring the issue to the College of Liberal Arts and Sciences; see this page for more information: https://clas.uiowa.edu/students/handbook/student-rights-responsibilities.

Final Examination Policies. The final exam schedule is announced around the fifth week of classes; students are responsible for knowing the date, time, and place
of a final exam. Students should not make travel plans until knowing this information. No exams of any kind are allowed the week before finals with very few exceptions made (for labs, ESL and some world language courses, and off-cycle courses): https://registrar.uiowa.edu/final-examination-scheduling-policies.

**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 on the basis of race, class, gender, sexual orientation, national origin, and other identity categories set forth in the University’s Human Rights policy. For more information, contact the Office of Equal Opportunity and Diversity (https://diversity.uiowa.edu/eod; +1 319 335-0705).

**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 must uphold the UI mission and contribute to a safe environment that enhances learning. Incidents of sexual harassment must be reported immediately. For assistance, please see https://osmrc.uiowa.edu/.