STAT:4101 (0002) Mathematical Statistics II
Spring 2020

Lectures MWF 10:30 AM – 11:20 AM
Seamans Center 2217

Instructor Boxiang Wang, 261 SH, boxiang-wang@uiowa.edu
Office Hours W 11:20 AM – 2:20 PM
Teaching Assistant Zongyi Xu, zongyi-xu@uiowa.edu
Department Statistics & Actuarial Science, 241 SH.
http://www.stat.uiowa.edu
DEO Professor Kung-Sik Chan, 319-335-0712,
kung-sik-chan@uiowa.edu

Course Website. Announcements, homework problems, lecture notes, and other course
information will be posted on ICON http://icon.uiowa.edu.

Course Description and Objectives.
This is a course in mathematical statistics intended for upper-level undergraduate stu-
dents in the mathematical sciences as well as for graduate students in all disciplines. The
goal is to give students a solid foundation in the theory and methods of statistical in-
ference. Main topics include convergence in distribution and convergence in probability,
point estimation, confidence intervals, and testing of statistical hypotheses.

Prerequisites. STAT4100.

Textbook. Introduction to Mathematical Statistics (7th ed.) Hogg, McKeans and Craig,
(Prentice Hall). We will cover chapters 4-8.

Homework. Homework is weekly and due 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, and homework must be neat and stapled. The
homework will be graded based on a three-point scale.

Quizzes and Exams. There will be five to seven 25-minutes quizzes at the beginning of
class periods. The quizzes are planned on Mondays with one-week advance notice. One
midterm will be held between 6:30 PM and 8:30 PM on Mar 4, 2020 at 40 SH. The final
exam will be comprehensive and the schedule will be announced by the university later.

All the quizzes, midterm, and final exam will be closed-book. Any cell phone is prohib-
ited in the exams. You may need a calculator in the exams.

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. Documents of the visits from MyChart are required for illness-related absence. Makeup exams are not available for other reasons, including student org field trips, club competitions, job interviews, and personal events. If it is impossible to arrange a makeup exam during the scheduled week, the final exam score substitutes for the missing midterm exam score. There will be no make up exams for the quizzes; the lowest grade of the quizzes will be dropped.

A student who is absent for more than five days or miss a quiz/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.

Some announcements may be posted through emails. Make sure you check your university email firstname-lastname@uiowa.edu at least every 48 hours. More teaching policies and resources are seen in: clas.uiowa.edu/faculty/teaching-policies-resources-examination-policies

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

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>30%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>25% Mar 4</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30% TBD</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>100%</td>
</tr>
</tbody>
</table>

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

**Attendance.** Due to the technical level and the frequent quizzes of this course, the attendance is required. You may use the following form to communicate with me about unavoidable absence.

https://clas.uiowa.edu/sites/default/files/ABSENCE%20EXPLANATION%20FORM.pdf

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

**CLAS: Polices and Procedures**

**Academic Integrity**

All undergraduates enrolled in courses offered by CLAS have, in essence, agreed to the College’s Code of Academic Honesty. Misconduct is reported to the College, resulting in suspension or other sanctions, with sanctions communicated with the student through the UI email address (https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).
Accommodations for Disabilities
UI is committed to an educational experience that is accessible to all students. A student may request academic accommodations for a disability (such as mental health, attention, learning, vision, and physical or health-related condition) by registering with Student Disability Services (SDS). The student is then responsible for discussing specific accommodations with the instructor. More information is at [https://sds.studentlife.uiowa.edu/](https://sds.studentlife.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](https://clas.uiowa.edu/students/handbook).

Communication and the Required Use of UI Email
Students are responsible for official correspondences sent to the 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. For more information, see [https://clas.uiowa.edu/students/handbook/student-rights-responsibilities](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. Visit [https://registrar.uiowa.edu/final-examination-scheduling-policies](https://registrar.uiowa.edu/final-examination-scheduling-policies).

Nondiscrimination in the Classroom
UI is committed to making the classroom a respectful and inclusive space for all people irrespective of their gender, sexual, racial, religious or other identities. Toward this goal, students are invited to optionally share their preferred names and pronouns with their instructors and classmates. 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 ([diversity.uiowa.edu](https://diversity.uiowa.edu)).

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/](https://osmrc.uiowa.edu/).