

The University of Iowa
The College of Liberal Arts and Sciences
Fall, 2023

Title of course: STAT:4100:0001 Mathematical Statistics I

Course meeting time and place: 8:30 - 9:20 AM MWF in 14 SH

Department of Statistics & Actuarial Science

Instructor: Prof. Osnat Stramer, 370 SH, Phone 335-3182, Email osnat-stramer@uiowa.edu

Student drop-in hours: MW 12:00 PM-1:00 PM, and F 12:30-1:00 in 370 SH. Students are invited to drop by during these hours to discuss questions about the course material or concerns. I am also available by appointment if you are unable to attend my drop-in hours.

Attendance: Attendance at lecture is highly recommended and may affect your grade. You are responsible for all we do in class. Lectures are not recorded or broadcast via Zoom.

Departmental Executive Officer: Professor Kung-Sik Chan, 241 SH, Phone 335-0712, E-mail kung-sik-chan@uiowa.edu

Course Prerequisite: MATH:2700 and MATH:2850.

Required Textbook: Introduction to Mathematical Statistics

- ISBN-10: 0134686993
- Authors: Robert Hogg, Joseph McKean and Allen Craig
- Publisher: Pearson; 8th edition (2018)

The ICON Direct program will be used. Your U-Bill will be charged automatically after your course has started, unless you **opt out** prior to the last day for tuition and fee reduction course deadline. If you use this option, check out your textbook in your ICON course. The Unizin Engage link needs to be in your ICON course navigation menu on the left of your course site.

Course Website: I will post announcements, homework problems, lecture notes, and other course information on ICON. We will mainly use professor Boxiang Wang lecture

notes who kindly gave us the permission to use it for this class. **The notes are for use only by students attending ATAT: 4100.**

Course Description and Objectives: The main objective of this course is to provide students with a strong foundation in probability, statistical terminology and concepts. This course should provide students with an understanding of statistical techniques and reasoning and provide a solid background for more advanced courses in statistics. We will cover almost all of chapters 1-3 and part of chapter 4 in the textbook.

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

Homework	15%
Quizzes	20%
One Midterm Exam	25%
Final Exam	40%
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Total	100%

A plus-minus grading system will be used. As a **rough** guide:

A		B		C		D		F
A+	98-100	B+	87-89	C+	77-79	D+	67-69	F < 59
A	93-97	B	83-86	C	73-76	D	63-66	
A-	90-92	B-	80-82	C-	70-72	D-	60-62	

- Grade cutoffs will be no higher than the usual
- I reserve the right to give bonus points at anytime, such as unannounced quizzes in lectures, attendance, etc. Bonus points are not available on an individual basis.
- Your final grade is based solely on your performance in this class.
- Your final grade can not be negotiated.

Homework: Homework will be **usually but not always** assigned on Wednesdays and due on the following Wednesday by the end of class. Electronic copies of homework are not acceptable. Homework should be properly stapled, with name, and HW number written at the top of the first page. Points will be deducted otherwise.

Due to time constraints the grader may grade only some of the assigned questions, but you are responsible for understanding all questions. Unless prior arrangements are made for reasons judged to be acceptable by me, late homework will receive zero credit as solutions will be posted soon after the homework is due. If there are grading errors those should be reported to your grader no later than a week after the graded HW are returned in class.

The lowest two homework scores will be dropped from each student's overall homework percentage, so each student can fail to turn in up to two homework assignments, for any reason, without penalty.

You are allowed to work on homework together, but must write up your own answers.

Exams: There will be one two hour evening midterm, and a two hour final exam. Calculators may be used for exams. You can bring one hand-written 8.5"x11" formula sheet (both sides) for the midterm exam and two hand-written 8.5"x11" formula sheets (both sides) for the final exam. If an exam is missed, a make-up exam will be permitted only if the circumstances of missing the exam satisfy university policies (documentation will be required in such a case). Grading errors should be reported to me no later than a week after the exams are returned.

Tentative schedule for the exams

Exam	Date	Location	Time
<i>Midterm</i>	Thursday, November 9		6:30PM - 8:30PM
<i>Final:</i>	TBA	TBA	TBA

Quizzes: There will be 5 closed-book quizzes (around 20 minutes or so) towards the end of class period. Calculators may be used for quizzes. You can bring one hand-written 8.5"x11" formula sheet (one side only) for each quiz. The policy on make-ups for quizzes is identical to the policy for exams. Like HW and exams, grading errors should be reported no later than a week after the quizzes are returned in class.

Tentative schedule for the quizzes

1. *Quiz One:* **Friday, September 15**
2. *Quiz Two:* **Friday, September 29**
3. *Quiz Three:* **Friday, October 13**
4. *Quiz Four:* **Friday, October 27**
5. *Quiz Five:* **Friday, December 1**

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; after this deadline you will need collegiate approval. You can look up the 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

Basic Needs and Support for Students

Classroom Expectations

Exam Make-up Owing to Absence

Free Speech and Expression

Mental Health

Military Service Obligations

Non-discrimination

Religious Holy Days

Sexual Harassment/Misconduct and Supportive Measures

Sharing of Class Recordings