

# STAT 4101: Mathematical Statistics II, Section 1

Spring 2020

8:30 – 9:20 am MWF in 40 Schaeffer Hall (SH)

<b>Instructor:</b>	Sanvesh Srivastava
<b>Email:</b>	sanvesh-srivastava@uiowa.edu
<b>Office:</b>	219 SH
<b>Office hours:</b>	9:25 am – 10:25 am MWF in 219 SH
<b>Lectures:</b>	8:30 – 9:20 am MWF in 40 SH
<b>Website:</b>	Canvas <a href="https://uiowa.instructure.com/">https://uiowa.instructure.com/</a>

## Departmental Information and Executive Officer

**College:** College of Liberal Arts and Sciences

**Department:** Statistics and Actuarial Science

**Executive Officer:** Kung-Sik Chan (kung-sik-chan@uiowa.edu)

**Address:** 241 SH

**Contact:** (319)-335-0712

**Email:** [statistics@uiowa.edu](mailto:statistics@uiowa.edu); [actuarial-science@uiowa.edu](mailto:actuarial-science@uiowa.edu)

**Website:** <http://www.stat.uiowa.edu>

## Textbook and course materials

Introduction to Mathematical Statistics (7<sup>th</sup> ed.) Hogg, McKean and Craig, (Prentice Hall). We will cover chapters 4, 5, 6, 7, and 8. I will post announcements, homework problems, lecture notes, and other course information on Canvas.

## Course Description and objectives

This course is a continuation of STAT 4100. It is intended for upper-level undergraduate students 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 inference. Main topics include convergence in distribution and convergence in probability, point estimation, confidence intervals, and testing of statistical hypotheses.

## Pre-requisites

STAT 4100.

## **Attendance**

Attending classes is required, but I won't take attendance.

## **Office hours**

Instructor office hours are every Mondays, Wednesdays, and Fridays from 9:25 am – 10:25 am in 219 SH. These timings can change after the first week of classes to accommodate the schedule of registered students. If you are unable to attend office hours during these times, then you should email the instructor for an appointment.

## **Grades**

Your grade will consist of Homework (20%), Quizzes (10%), Midterm I (20%), Midterm II (20%) and a Final Exam (30%). At the end of the semester, HW, Quizzes, Midterm I and II, and Final grades will be normalized within each category in order to calculate the final course grade.

A *plus-minus* grading system will be used. Here is a *tentative grading scale*: A,A-: 88%–100%, B+,B,B-: 77%–88%, C+,C,C-: 61%–77%, D: 50%–61%, F:<50%. A+ will be given only in exceptional cases. I reserve the right to change the grade distribution by 10% so that it suits the diversity of students in the class.

## **Homework**

Homework will be usually assigned each week on Fridays and will be due on the following Friday at the beginning of the class. Any exceptions will be announced in class or on Canvas. Due to time constraints, the grader may grade only some of the assigned questions, but you are responsible for understanding all questions.

All homeworks will contribute towards your final grade. Unless prior arrangements are made well in advance, 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.

## **Quizzes and Exams**

We will (tentatively) have four to five announced quizzes in class. They will emphasize examples and key concepts repeatedly mentioned in class and in homework problems. There will be two midterms and one final exam. The final exam will be comprehensive and cumulative. All exams will be closed book. You will be allowed *one* A4-sized handwritten “cheat-sheet” in the exams but not in the quizzes.

## **Grading Errors**

Although every effort will be made to mark your work accurately, sometimes grading mistakes happen. If you believe that an error has been made on an in-class problem or exam, return the paper to the instructor immediately, stating your claim in writing.

## Important Dates

Check the office of the registrar website for the academic calendar:

<https://registrar.uiowa.edu/academic-calendar#!spring-2020>

Some important **tentative** dates for STAT 4101:001 are as follows:

<b>Midterm I:</b>	Tue, Feb 25
<b>Midterm II:</b>	Tue, Apr 07
<b>Final Exam:</b>	Mon, May 11 – Fri, May 15 (to be decided by the university)

## College of Liberal Arts and Sciences: Policies and Procedures

<http://clas.uiowa.edu/faculty/teaching-policies-resources>

**Administrative Home of the Course** The College of Liberal Arts and Sciences is the administrative home of this course and governs matters such as the add/drop deadlines, the second-grade-only option, and other related issues. Different colleges may have different policies. Questions may be addressed in 120 SH or see the CLAS Student Academic Handbook:

[www.clas.uiowa.edu/students/academic\\_handbook/index.shtml](http://www.clas.uiowa.edu/students/academic_handbook/index.shtml)

**Electronic Communication** University policy specifies that students are responsible for all official correspondences sent to their standard University of Iowa email address (@uiowa.edu). Students should check this account frequently. (Operations Manual, III.15.2. Scroll down to k.11.)

**Academic Fraud** Plagiarism and any other activities when students present work that is not their own are academic fraud. Academic fraud is a serious matter and is reported to the departmental DEO and to the Associate Dean for Undergraduate Programs and Curriculum. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. See the CLAS Student Academic Handbook.

**Making a Suggestion or a Complaint** Students with a suggestion or complaint should first visit the instructor, then the course supervisor, and then the departmental DEO. Complaints must be made within six months of the incident. See the CLAS Student Academic Handbook.

**Accommodations for Disabilities** A student seeking academic accommodations should first register with Student Disability Services and then meet privately with the course instructor to make particular arrangements. [www.uiowa.edu/~sds/](http://www.uiowa.edu/~sds/)

**Understanding 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 have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported immediately. See the UI Comprehensive Guide on Sexual Harassment at [www.uiowa.edu/~eod/policies/sexual-harassment-guide/index.html](http://www.uiowa.edu/~eod/policies/sexual-harassment-guide/index.html) for assistance, definitions, and the full University policy.

**Reacting Safely to Severe Weather** In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. (Operations Manual, IV.16.14. Scroll down to e. h. and i.)