

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

Title of Course: STAT:3101-0001 Introduction to Mathematical Statistics II
Cross listed as IGPI:3101:0001

Course meeting time and place: MWF – 10:30am -11:20am; W207 PBB

Department of Statistics and Actuarial Science : <http://stat.uiowa.edu>

Course ICON site: To access the course site, log into [Iowa Courses Online \(ICON\)](https://icon.uiowa.edu/index.shtml) <https://icon.uiowa.edu/index.shtml> using your Hawk ID and password.

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. Graduate students, however, must adhere to the [academic deadlines set by the Graduate College](#).

Instructor

Nariankadu **Shyamalkumar**

Office location: 233 SH

Student drop-in hours: MWF 11:30am – 12:30 pm. 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.

Phone: 319-335-1980

E-mail: shyamal-kumar@uiowa.edu

DEO: Dr. Kung-Sik Chan, 241 SH, 335-0712, kung-sik-chan@uiowa.edu

Grader

Ying Xiang – ying-xiang@uiowa.edu

Description of Course and Learning Objectives

This course is the second in a two-course sequence introducing mathematical statistics. The first course (STAT:3100) introduced you to probability and distribution theory, which facilitates building a probabilistic model for a data generating process. This course concerns extracting information from a sample about the unknown parameters of such probabilistic models, which would lead to estimates for them or answering hypothetical questions concerning them, or even help in predicting future/unobserved data. In particular, the topics covered include point estimation, interval estimation, and testing of statistical hypotheses. We will cover from the text, selected sections of Part I, all of Part II, and time permitting selected sections of Part III.

Textbook/Materials

The required textbook for this course is the following, which is available for download from <https://link.springer.com/book/10.1007/978-0-387-21736-9>:

- All of Statistics – A Concise Course in Statistical Inference
- ISBN: 0-387-40272-1
- Larry Wasserman
- Springer
- 2004

Academic Honesty and Misconduct

All students in CLAS courses are expected to abide by the [CLAS Code of Academic Honesty](#). Undergraduate academic misconduct must be reported by instructors to CLAS according to [these procedures](#). Graduate academic misconduct must be reported to the Graduate College according to Section F of the [Graduate College Manual](#).

Student Complaints

Students with a complaint about a grade or a related matter should first discuss the situation with the instructor and/or the course supervisor (if applicable), 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.

Grading System and the Use of +/-

Undergraduate and graduate students will be treated as two separate groups when it comes to assigning final grades. The two mid-terms and the final will be assigned a letter grade each, and assignments will be assigned a cumulative letter grade at the end of the semester. The weighted average of the letter grades will determine the final course grade. + and - grades will be used. The **rough** percentages of grades A - F would be 18%, 36%, 39%, 5% and 2%, respectively.

Course Grades

Final course grades will be assessed based on your performance in the following activities:

Homework – 20%

Assignments will be given to you by Friday of every week there is an assignment. They have to be electronically returned by the beginning of Friday's class of the following week on ICON.

MidTerms – 25% each (for a total of 50%)

Each exam will cover material from approximately a third of the course. The exams will test student's knowledge of concepts, and their ability to use them to solve problems. These exams will be held in class and consist predominantly of written answers. The first exam will be **Monday, 27th of February** and the second on **Monday, 10th of April**.

Date and Time of the Final Exam – 30%

The final examination date and time will be announced by the Registrar generally by the fifth week of classes and it will be announced on the course ICON site once it is known. **Do not plan your end of the semester travel plans until the final exam schedule is made public. It is your responsibility to know the date, time, and place of the final exam.** According to Registrar's final exam policy, students **have a maximum of two weeks after the announced final exam schedule** to request a change if an exam conflict exists or if a student has more than two exams in one day (see the [policy](#) here).

College of Liberal Arts and Sciences (CLAS) Course Policies**Attendance and Absences**

University regulations require that students be allowed to make up examinations which have been missed due to illness or other unavoidable circumstances. Students with mandatory religious obligations or UI authorized activities must discuss their absences with me as soon as possible. Religious obligations must be communicated within the first three weeks of classes.

Exam Policies**Communication: UI Email**

Students are responsible for all official correspondences sent to their UI email address (uiowa.edu) and must use this address for any communication with instructors or staff in the UI community.

Other Expectations of Student Performance

Students have the right to a distraction-free learning environment. Students are expected to help each other learn and to contribute overall to the learning environment of the course. Arriving prepared for class is part of this expectation.

Where to Get Help

Tutor Iowa: <https://tutor.uiowa.edu/>

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](#)