The University of Iowa The College of Liberal Arts and Sciences Fall 2022

Statistical Methods and Computing: STAT:2010 Other numbers of course on MyUI if cross-listed Course meeting time and place: MW 10:30-11:20, W151 PBB Department of Statistics and Actuarial Science: <u>https://stat.uiowa.edu/</u>

Course ICON site: To access the course site, log into <u>lowa Courses Online (ICON)</u> <u>https://icon.uiowa.edu/index.shtml</u> 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. Other UI colleges may have different policies.

Instructor: Erin Post Office location: 211 SH Office Hours: T, Th 1:00-2:30 PM and by appointment E-mail: <u>erin-post@uiowa.edu</u> DEO: Dr. Kung-Sik Chan, 241 SH, <u>kung-sik-chan@uiowa.edu</u>

Lab Instructor: Anh Nguyen Office location: 267 SH Office Hours: T, Th 10:00-11:30 AM Email: <u>phuonganh-nguyen@uiowa.edu</u>

Course Supervisor Dr. Aixin Tan E-mail: aixin-tan@uiowa.edu

Description of Course

Through hands-on experience with real data from a wide variety of applications, students will learn basic methods required for data analysis and interpretation. The emphasis will be on formulating questions, choosing appropriate statistical techniques for a given problem, verifying whether the assumptions behind the techniques are met by the dataset, drawing appropriate conclusions from the analysis, and communicating the results. Students will learn the basics of SAS, a statistical software package that is used in many government, industry, and research fields.

Learning Objectives

STAT:2010 is approved for General Education in the Quantitative and Formal Reasoning category.

Textbook/Materials

Moore, Notz, and Fligner *The Basic Practice of Statistics, 9th Edition*, 2021, Macmillan Learning.

We have ordered the 9th edition via ICON Direct. Your U-Bill will be charged automatically for this resource. If you have access to the 9th edition of this book elsewhere, be sure to opt out before the deadline: ICON/Student Tools/ICON Direct Opt Out.

Academic Honesty and Misconduct

All students in CLAS courses are expected to abide by the <u>CLAS Code of Academic</u> <u>Honesty</u>. Undergraduate academic misconduct must be reported by instructors to CLAS according to <u>these procedures</u>. Graduate academic misconduct must be reported to the Graduate College according to Section F of the <u>Graduate College Manual</u>.

You are encouraged to discuss and study course material with others in the class. However, every student is responsible for submitting their own work, reflective of their own effort. If you choose to discuss with others on homework, please also write the names of others in your study group on your assignment.

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 <u>CLAS Undergraduate Programs</u> for support when the matter is not resolved at the previous level. Graduate students should contact the CLAS <u>Associate Dean for Graduate Education and Outreach and Engagement</u> 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 <u>drop deadline for this course</u> 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 <u>Registrar's website</u>. Undergraduate students can find policies on dropping and withdrawing <u>here</u>. Graduate students should adhere to the <u>academic deadlines</u> and policies set by the Graduate College.

Grading System and the Use of +/-

A plus/minus grading system will be used in this class. As a rough guide: A, A- = 90-100%; B+, B, B- = 80-90%; C+, C, C- = 70-80%; D+, D, D- = 60-70%.

Course Grades

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

The course components will be weighted as follows:

Homework	15%
Quizzes	5%
Midterms	50% (25% each)
Final Exam	30%

Homework

In general, one homework assignment will be assigned each week, and will be due in ICON the following week in the form of a Word document, PDF, or similar. Since many homework problems involve SAS coding and interpretation of results, it is often convenient to use a text editor (e.g. Word) to write homework. You may also submit scans of clear hand-written solutions, which may be easier when you need to include formulas/mathematical work.

You must show all work when solving written homework problems. For computer problems, turn in your code (computer program), and the useful parts of their output. Weekly labs should prepare you to do this confidently.

You are encouraged to discuss and study course material with others in the class. However, every student is responsible for submitting their own work, reflective of their own effort. If you choose to discuss with others on homework, please also write the names of others in your study group on your assignment.

Late homework is accepted only as required by university policy, i.e., due to "illness, mandatory religious obligations, or other unavoidable circumstances or University activities."

Questions about homework, quiz, and exam grades must be made within 7 days of posting in order for changes to be considered.

Quizzes

Short quizzes will be given online on a regular basis. They are relatively low-stakes and are meant to provide timely evaluations of your learning, and to help keep you on track.

Exams

There will be two midterm exams and one comprehensive final exam. All exams will be administered in the "take-home" format via ICON. In each case, you will be given a minimum of 24 hours to complete your exams. Exams will be written in such a way that a well-prepared student will be able to complete the midterms in 1 hour, and the final exam in 2 hours. Exams are open note, book, etc. You may NOT collaborate with others students or individuals (including tutors, friends, and online message boards such as Stack and Chegg) on exams. Failure to comply with this policy will result in a score of 0 on the exam.

Date and Time of the Final Exam

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).

Calendar of Course Exams

Take-home exams will be administered during the following weeks. You will have no less than 24 hours to complete the exam and at least 1 week of notice should the scheduling of the exam change:

Midterm 1	Week of October 2
Midterm 2	Week of November 14
Final Exam	Week of December 12

College of Liberal Arts and Sciences (CLAS) Course Policies <u>Attendance and Absences</u>

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.

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