Statistical Methods and Computing – STAT:2010 – Spring 2022

1. General information+

<table>
<thead>
<tr>
<th>Instructor</th>
<th>Erin Post, <a href="mailto:erin-post@uiowa.edu">erin-post@uiowa.edu</a></th>
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</thead>
<tbody>
<tr>
<td>Instructor Virtual Office Hours</td>
<td>T, Th 8:30-10am</td>
</tr>
<tr>
<td>Lab Instructor</td>
<td>Steve Manning, <a href="mailto:steven-manning@uiowa.edu">steven-manning@uiowa.edu</a></td>
</tr>
<tr>
<td>Lab Instructor Virtual Office Hours</td>
<td>T, Th 1:30-3pm</td>
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For office hours, find the “Zoom” button on the left side of the ICON course page, then click on the correct window. Please also feel free to (1) ask us general questions by posting in the “Discussion” in ICON, (2) send questions that are specific to you (e.g., problem with a homework score) by email, and (3) make appointments via email if you need to meet with Erin or Zhen outside of office hours.

**Regular lectures:** MW 10:30-11:20 am, in person, 101 BCSB

**Labs/Discussions**

Each student should have registered for one of the following three sessions, and will only need to attend that one session. During most labs, we will use SAS software on the computers in the lab room, 41 SH.

<table>
<thead>
<tr>
<th>Section</th>
<th>Lab time</th>
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<tr>
<td>0A11</td>
<td>F 10:30-11:20am</td>
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<tr>
<td>0A12</td>
<td>F 11:30am – 12:20 pm</td>
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<tr>
<td>0A13</td>
<td>F 12:30 pm – 1:20 pm</td>
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Relevant course schedules, notes, and assignments will be posted on the course page on ICON. You are responsible to regularly

- Check the **Announcements** and **Modules** pages for updates
- Review lecture slides, homework assignments, and other relevant materials
- Do quizzes and submit homework by their deadlines within **Assignments**

**Required Textbook:** *The Basic Practice of Statistics, 8th ed.* 2017 (Moore, Notz, and Fligner).

**Department:** Statistics and Actuarial Science, 241 SH

**DEO:** Dr. Kung-Sik Chan, 241 SH. Phone: (319) 335-2849. Email: kung-sik-chan@uiowa.edu
2. Course goals and objectives

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.

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

3. Evaluation of students

3.1. 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.”

3.2. Attendance and “Mini Quizzes”

You are required to attend all lectures and discussions, at the designated times, as well as all lab sessions. If you must miss a lecture or lab due to illness or other valid excuse (see “Late Homework” above), please send the instructor an email with explanation PRIOR to the class.

I will hold 3 completion-based “Mini Quizzes” during lecture this semester, with 2 counting towards the Quiz portion of your final grade.

3.3. 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.
3.4. **Exams**

There will be two 50-minute in-class midterms, and one comprehensive 2-hour final. Students may use one (double-sided) 8.5 x 11-inch sheet of paper with formulas and notes during the first midterm, two for the second midterm, and three for the final exam. You will also need a calculator (scientific or graphing); phone calculators will not be allowed during exams.

Tentative dates for the exams are below:

- **Midterm 1** Wednesday, February 23
- **Midterm 2** Wednesday, April 6
- **Final** Week of May 9 – Day/Time TBD

Missed exams may be made up only with documentation of reasons required by University policy.

3.5. **Grading**

The course components will be weighted as follows:

- Homework 15%
- Quizzes & Mini Quizzes 5%
- Midterms 50% (25% each)
- Final 30%

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

If you have questions about grading of Homework or Exams, please let me know **within 7 days** of receiving the grade.
ATTENDANCE AND CLASSROOM EXPECTATIONS

Students are responsible for attending class and for knowing an instructor’s attendance policies, which vary by course and content area. All students are expected to attend class and to contribute to its learning environment in part by complying with University policies and directives regarding appropriate classroom behavior or other matters.

ABSENCES

Students are responsible for communicating with instructors as soon they know that an absence might occur or as soon as possible in the case of an illness or an unavoidable circumstance. Students can use the CLAS absence form to help communicate with instructors who will decide if the absence is excused or unexcused; the form is located on ICON within the top banner under “Student Tools.” Delays by students in communication with an instructor could result in a forfeit of what otherwise might be an excused absence (https://clas.uiowa.edu/students/handbook/attendance-absences).

ABSENCES: ILLNESS, UNAVOIDABLE CIRCUMSTANCES, AND UNIVERSITY SPONSORED ACTIVITIES

Students who are ill, in an unavoidable circumstance affecting academic work, or who miss class because of a University sponsored activity are allowed by UI policy to make up a missed exam. Documentation is required by the instructor except in the case of a brief illness. Students are responsible for communicating with instructors as soon as the absence is known (https://opsmanual.uiowa.edu/students/absences-class#8.1).

ABSENCES: HOLY DAYS

The University is prepared to make reasonable accommodations for students whose religious holy days coincide with their classroom assignments, test schedules, and classroom attendance expectations. Students must notify their instructors in writing of any such Religious Holy Day conflicts or absences within the first few days of the semester or session, and no later than the third week of the semester. If the conflict or absence will occur within the first three weeks of the semester, the student should notify the instructor as soon as possible. See Operations Manual 8.2 Absences for Religious Holy Days for additional information.

ABSENCES: MILITARY SERVICE OBLIGATIONS

Students absent from class due to U.S. veteran or U.S. military service obligations (including military service-related medical appointments, military orders, and National Guard Service obligations) must be excused without penalty. Instructors must make reasonable accommodations to allow students to make-up exams or other work. Students must communicate with their instructors about the expected possibility of missing class as soon as possible. (For more information, see https://opsmanual.uiowa.edu/iv-8-absences-class%C2%A0-0).

ACADEMIC MISCONDUCT

All undergraduates enrolled in courses offered by CLAS have in essence agreed to the College’s Code of Academic Honesty. Academic misconduct affects a student’s grade and is reported to the College which applies an additional sanction, such as suspension. Outcomes about misconduct are communicated through UI email (https://clas.uiowa.edu/students/handbook/academic-fraud-honor-code).

ACADEMIC ACCOMMODATIONS FOR STUDENTS WITH DISABILITIES

The University is committed to providing an educational experience that is accessible to all students. If a student has a diagnosed disability or other disabling condition that may impact the student’s ability to complete the course requirements as stated in the syllabus, the student may seek accommodations through Student Disability Services (SDS). SDS is responsible for making Letters of Accommodation (LOA) available to the student. The student must provide a LOA to the instructor as early in the semester as possible, but requests not made at least two weeks prior to the scheduled activity for which an accommodation is sought may not be accommodated. The LOA will specify what reasonable course accommodations the student is eligible for and those the instructor should provide. Note that accommodations are not granted retroactively but from the time of the student’s request to the instructor onward. Additional information can be found on the SDS website.

CLASS RECORDINGS: PRIVACY AND SHARING

Course lectures and discussions are sometimes recorded or live-streamed. These are only available to students registered for the course and the intellectual property of the faculty member. These materials may not be shared or reproduced
without the explicit written consent of the instructors. Students may not share these recordings with those who are not enrolled in the course; likewise, students may not upload recordings to any other online environment. Doing so is a breach of the Code of Student Conduct and could be a violation of the Federal Education Rights and Privacy Act (FERPA); also see https://dos.uiowa.edu/policies/code-of-student-life/.

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 (Operations Manual, III.15.2). Emails should be respectful and brief, with complex matters addressed during the instructor’s drop-in hours, for example. Faculty are not expected to answer email after business hours or during the weekends.

COMPLAINTS ABOUT ACADEMIC MATTERS
Students with a complaint about a grade or a related academic issue should first visit with the instructor and then with the course supervisor (if one is assigned), and next with the Chair of the department or program offering the course. If not resolved, students may bring their concerns to the College of Liberal Arts and Sciences: https://clas.uiowa.edu/students/handbook/student-rights-responsibilities.

FINAL EXAMINATION POLICIES
The final exam schedule is published during the fifth week of the fall and spring semesters or on the first day of summer classes; students are responsible for knowing the date, time, and place of their final exams. Students should not make travel plans until knowing this information. A student with exams scheduled on the same day and time or who have more than two final exams on the same day should visit this page for how to resolve these problems by the given deadline: https://registrar.uiowa.edu/makeup-final-examination-policies. No exams may be scheduled the week before finals; some exception, however, have been made for labs, language courses, and off-cycle courses (https://registrar.uiowa.edu/final-examination-scheduling-policies).

FREE SPEECH AND EXPRESSION
The University of Iowa supports and upholds the First Amendment protection of freedom of speech and the principles of academic and artistic freedom. We are committed to open inquiry, vigorous debate, and creative expression inside and outside of the classroom. Visit Free Speech at Iowa for more information on the University’s policies on free speech and academic freedom (https://freespeech.uiowa.edu/).

HOME OF THE COURSE
The College of Liberal Arts and Sciences (CLAS) is the home of this course, and CLAS governs the course’s add and drop deadlines, the “second-grade only” option (SG0), and other undergraduate policies and procedures. Different UI colleges may have other policies or deadlines. See https://clas.uiowa.edu/students/handbook. Questions? Contact CLAS at clasps@uiowa.edu or 319-335-2633.

MENTAL HEALTH
Students are encouraged to be mindful of their mental health and seek help as a preventive measure or if feeling overwhelmed and/or struggling to meet course expectations. Students are encouraged to talk to their instructor for assistance with specific class-related concerns. For additional support and counseling, students are encouraged to contact University Counseling Service (UCS). Information about UCS, including resources and how to schedule an appointment, can be found at counseling.uiowa.edu. Find out more about UI mental health services at: mentalhealth.uiowa.edu. Student Health can also address related concerns (https://studenthealth.uiowa.edu/). These visits are free to students. After hours, students are encouraged to call the Johnson County Community Crisis Line at (319) 351-0140 or dial 911 in an emergency.

NON-DISCRIMINATION STATEMENT
The University of Iowa prohibits discrimination in employment, educational programs, and activities on the basis of race, creed, color, religion, national origin, age, sex, pregnancy, disability, genetic information, status as a U.S. veteran, service in the U.S. military, sexual orientation, gender identity, associational preferences, or any other classification that deprives the person of consideration as an individual. The university also affirms its commitment to providing equal opportunities and equal access to university facilities. For additional information on nondiscrimination policies, contact the Director, Office of Institutional Equity, the University of Iowa, 202 Jessup Hall, Iowa City, IA 52242-1316, 319-335-0705, oie-ui@uiowa.edu. Students may share their pronouns and chosen/preferred names in MyUI, which is accessible to instructors and advisors.
SEXUAL HARASSMENT
The University of Iowa prohibits all forms of sexual harassment, sexual misconduct, and related retaliation. The Policy on Sexual Harassment and Sexual Misconduct governs actions by students, faculty, staff and visitors. Incidents of sexual harassment or sexual misconduct can be reported to the Title IX and Gender Equity Office or to the Department of Public Safety. Students impacted by sexual harassment or sexual misconduct may be eligible for academic supportive measures and can learn more by contacting the Title IX and Gender Equity Office. Information about confidential resources can be found here. Watch the video for an explanation of these resources.