

The University of Iowa
College of Liberal Arts and Sciences
Department of Statistics and Actuarial Science

Probability & Statistics for Engineering & Physical Sciences

STAT:2020

Summer 2012

8:30-10:15 AM, MTWTh, 31 SH

<http://www.stat.uiowa.edu/~mbognar>

▷ **General Information**

- *Instructor:* Matt Bognar, 358 SH, 335-0799, matthew-bognar@uiowa.edu
- *Office Hours:* 10:15-11:45 AM Monday and Wednesday, and by appointment
- *DEO:* Luke Tierney, 241 SH, 335-0712
- *Textbook:* Montgomery and Runger (2011). *Applied Statistics and Probability for Engineers (5th edition)*, Wiley.
- *ICON/Web:* This course will use ICON (<http://icon.uiowa.edu>) and our course website (<http://www.stat.uiowa.edu/~mbognar>) for announcements, homework assignments, etc.

▷ **Course Objectives**

- In this course we will cover the following topics (in roughly this order):
 1. Probability theory
 2. Random variables
 3. Common statistical distributions
 4. Joint probability distributions
 5. Data collection, summary statistics, graphical displays
 6. Sampling distributions
 7. Confidence intervals
 8. Hypothesis testing
 9. Simple Regression
 10. Other topics (if time)
- Supplementation to the textbook, when needed, will be provided.
- We will not cover all of the material in the textbook. Focus your readings on the material that was covered in class.

▷ **Grading**

- *Exams:* There will be a midterm (25%) and a final exam (30%). Exam dates:
 - * Midterm Exam: Monday, July 9, 8:30-10:15 AM, 31 SH
 - * Final Exam: Thursday, July 26, 8:30-10:15 AM, 31 SH

Students are expected to be present for the exams at the *scheduled time*. It is your responsibility to make the appropriate arrangements *beforehand*.

- *Quizzes:* (25% total) Quiz dates:
 - * Quiz 1: Thursday, June 21
 - * Quiz 2: Thursday, June 28
 - * Quiz 3: Thursday, July 12
 - * Quiz 4: Thursday, July 19

Make-up quizzes will not be allowed under any circumstances. Unannounced quizzes may be given at any time.

- *Homework:* (20% total) Homework will be due each Thursday. Because the TA may not have enough time to grade each problem, a subset of the assigned problems may likely be graded. *Late homework will not be accepted under any circumstances.* Homework must be stapled, defuzzed, be neatly written in *pencil*, and look professional (points will be deducted for failing to do so). Excessively sloppy homework will receive a score of 0. Print your name in the upper right corner of your homework before handing-in.

- You are expected to attend all lectures in their entirety. Your attendance, participation, preparedness, work ethic, etc. may affect your grade.
- This course uses the +/– grading system (i.e. grades such as A–, B+, and B will be assigned).
- Grades will follow the usual 90, 80, 70, 60 breakdown. This class is not “curved”.
- Bonus points may be given at any time; this may be applied to any part of your grade.

▷ ***The College of Liberal Arts and Sciences Policy and Procedures***

- *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 to 120 Schaeffer Hall, or see the CLAS Student Academic Handbook.

<http://www.clas.uiowa.edu/students/handbook>

- *Electronic Communication:* University policy specifies that students are responsible for all official correspondences sent to their University of Iowa e-mail address (@uiowa.edu). Faculty and students should use this account for correspondences. (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 Academic Fraud section of the Student Academic Handbook.
- *CLAS Final Examination Policies:* Final exams may be offered only during finals week. No exams of any kind are allowed during the last week of classes. Students should not ask their instructor to reschedule a final exam since the College does not permit rescheduling of a final exam once the semester has begun. Questions should be addressed to the Associate Dean for Undergraduate Programs and Curriculum.
- *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. See <http://www.uiowa.edu/~sds> for more information.
- *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 for assistance, definitions, and the full University policy.

<http://www.uiowa.edu/~eod/policies/sexual-harassment-guide>

- *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. For more information on Hawk Alert and the siren warning system, visit the Public Safety web site <http://police.uiowa.edu>