Approved GE: Quantitative or Formal Reasoning

Prerequisite: Three years of high school math or 22M:001

Instructors: 1st three weeks -- J. Broffitt, 231 SH, 335-0820, james-broffitt@uiowa.edu
2nd three weeks -- R. Russo, 205 SH, 335-0817, rrusso@stat.uiowa.edu

Office Hours:
Professor Broffitt 11:30 to 12:30 MTWR, or by appointment.
Professor Russo 11:30 to 12:30 MTWR, or by appointment.

Department: Statistics & Actuarial Science, 241 SH, 335-0712. Department Chair - L. Tierney

Tutors: A list of independent tutors can be found at http://www.stat.uiowa.edu/courses/tutors.html

Classes:
Section 1 - 8:30 to 9:55 MTWRF, 131 SH
Section 2 - 10:00 to 11:25 MTWRF, 131 SH

Text: Statistics, 4th edition by Freedman, Pisani, and Purves. This is an excellent book with lots of good exercises. Our goal is to cover Chapters 1-5, 8-10, 12-21, 23-24, and 26-28. This is about one chapter per day!

Objectives: This course takes a conceptual approach to the major ideas of probability and statistics. Topics include experiments and observational studies, descriptive statistics, correlation and regression, elements of probability, chance error, expectation, standard error, sampling, confidence intervals, and hypothesis tests. This is a course on statistics and not mathematics; however, you need to be comfortable with math at the level of elementary algebra (e.g., equation of a straight line, plotting points, taking powers and roots, percentages).

Attendance: Attendance is mandatory. Illness is a legitimate reason to miss class, but just feeling a little under the weather is not. There are only 28 classes and two of those are reserved for exams, so it is important that you do not miss class. We expect students to be on time and attend all classes. Excessive absences may result in a lowering of your grade or a failing grade.

Friendly Advice: Main rule -- do not fall behind! The material is cumulative. Most of you will need a minimum of three hours of study after each class (not including class time) to successfully learn the course material. Some of you may need more. If you do not put in the time, you will not learn. Your goal should be to understand rather than to just memorize facts and formulas.

Come to office hours to get your problems sorted out promptly. Read the text carefully, keeping up with the lectures. Don’t read it like a novel. Do the exercises and if you get stuck, look for similar worked exercises. Work problems by yourself or in small groups -- both assigned homework problems and others from the text. Working exercises is the major way to assess your understanding and to solidify concepts. You cannot learn how to solve problems by merely watching your teacher do them -- you must solve
problems on your own. When you do not understand, ask questions. Be a participant and not just a spectator.

**Homework:** We do not mind if you work with others on homework problems; however, you should first attempt to do the problems on your own, and you are to write the solutions on your own rather than copying the work of others. Do not merely write down answers, but clearly show how you got your results. Submit homework on 8.5x11 paper. If there is more than one page, staple them together, and be sure to include your name, course and section number. Homework may be handed in one class period late, but late homework will carry a 25% penalty.

**Exams and Quizzes:** Quizzes and exams are closed book. You may have one sheet of 8.5 X 11 paper with notes on both sides for the exams. Do not wear caps or hats during the exams or quizzes.

There will be six quizzes and two exams. Dates are as follows:

- **Quiz 1**: Monday, June 15
- **Quiz 2**: Thursday, June 18
- **Quiz 3**: Tuesday, June 23
- **Quiz 4**: Thursday, July 2
- **Quiz 5**: Wednesday, July 8
- **Quiz 6**: Tuesday, July 14
- **Exam 1**: Friday, June 26 (1505 SC)
- **Exam 2**: Friday, July 17 (TBA)

The second exam will cover only the final three weeks of the course. There will not be make-ups for quizzes or exams, but the lowest quiz grade will be dropped. Thus if you must be gone when a quiz occurs, that quiz can count as your low one.

**Grades:** Grades will be based on the percent of points earned on quizzes, exams and homework. In determining your grade, quizzes will count 20%, homework will count 10% and each exam will count 35%. Your grade for this course will be assigned according to the following approximate scale:

- **A**: 90% to 100%
- **B**: 80% to 89%
- **C**: 70% to 79%
- **D**: 60% to 69%

This is not an absolute scale. The cutoff points may vary, and borderline cases may receive a + or −.

Course policies are governed by the College of Liberal Arts and Sciences. University policies regarding Student Rights and Responsibilities can be found at [http://www.clas.uiowa.edu/students/academic_handbook/](http://www.clas.uiowa.edu/students/academic_handbook/)

**Off-Cycle Course:** This is an off-cycle course because it does not begin at the normal date for a six-week course. Consequently, deadlines published in the University calendar do not apply. Please be aware of these deadlines:

- Begin Date -- 06/09/2009
- End Date -- 07/17/2009
- Last day to add or drop the course without $10 charge -- 06/15/2009
- Last day for tuition & fee reduction if you drop the course or reduce hours (See Note below) --06/15/2009
- Last day to add without dean’s approval or drop without a "W" -- 06/15/2009
- Last day to drop without dean’s approval, undergraduate -- 07/06/2009

Note: If you terminate enrollment in every course (even if enrolled in only one course), it is considered a withdrawal of your entire registration, and you will be held to a percentage of the tuition and fee assessment for that course or
Special Arrangements: We would like to hear from anyone who has a disability which may require some modification of seating, testing or other class requirements so that appropriate arrangements may be made. Please see me about this as soon as possible.

College of Liberal Arts and Sciences: Policies 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 in 120 Schaeffer Hall or see the CLAS Student Academic Handbook: 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 e-mail 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/

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 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.)