Elementary Statistics and Inference  
Summer 2007

Prerequisite: There 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

Email: Email is usually not an effective medium for resolving questions about homework problems, exercises in the text, or conceptual problems. Face to face contact is better. We prefer not to answer such questions by email, but questions about administrative aspects of the course are welcome via email. At any time we would be interested in learning your perceptions about how the course is going.

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  
(Summer Chair – J. Broffitt).

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, 15 SH  
Section 2 – 10:00 to 11:25 MTWRF, 15 SH

Drop dates: Because this course is taught on an off-cycle schedule, the drop dates are as follows:  
June 11 is the last day to drop without a grade of W on your transcript. The last drop date is June 29.  
Other such dates may be found at http://www.registrar.uiowa.edu/more/coursedeadlines.aspx.

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 Advise: 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 problems 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 eight quizzes and two exams. Dates are as follows:

- **Quiz 1:** Friday, June 8
- **Quiz 2:** Tuesday, June 12
- **Quiz 3:** Friday, June 15
- **Quiz 4:** Tuesday, June 19
- **Quiz 5:** Friday, June 29
- **Quiz 6:** Tuesday, July 3
- **Quiz 7:** Friday, July 6
- **Quiz 8:** Tuesday, July 10
- **Exam 1:** Friday, June 22 (1505 SC)
- **Exam 2:** Friday, July 13

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/)

**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.