22S:25/7P:25 (STAT:1020) ELEMENTARY STATISTICS AND INFERENCE Fall 2011

TIME/LOCATION Lecture C, 11:30-12:20, MWF, C20 PC
Lecture C Disc. Sections: #31 (cancelled) #35 3:30-4:20, T, 150 SH
#32 (cancelled) #36 3:30-4:20, Th, 150 SH
#33 8:30-9:20, T, 74 SH #37 5:00-5:50, T, 150 SH
#34 8:30-9:20, Th 74 SH #38 5:00-5:50, Th, 3 SH

INSTRUCTOR M. Russo 257 SH, 353-2295, mary-russo@uiowa.edu
INSTRUCTOR WEBPAGE http://www.stat.uiowa.edu/~mrusso/

COURSE WEBSITE http://www.stat.uiowa.edu/~mrusso/courses.htm
Please refer to the website throughout the semester for important announcements and course information.

OFFICE HOURS Tues. 10:00-12:00, Wed. 12:45-1:45, and by appointment
Occasionally, hours may be rescheduled to accommodate students who plan to attend -- announcements of changes will be made in class and on the website.

PREREQUISITE 22M:001 (MATH:0100) Basic Algebra I, or equivalent

REQUIRED TEXTS Statistics by Freedman, Pisani, Purves; W.W. Norton & Co., 4th ed. and
worksheets/supplements/notes from the course website. Please bring printed copies of the worksheets to class. The text is available at Univ. Book Store. One copy will be placed on reserve at the Main Library.

COURSE TOPICS This course uses a conceptual approach to the major ideas of probability and
statistics. Topics include graphing techniques for presenting data, descriptive statistics, the normal
distribution, correlation, regression and prediction, probability, sampling distribution models,
logic of statistical inference, estimation, and tests of significance.

GOALS This course has been approved to satisfy the General Education Program (GE) requirement
in Quantitative or Formal Reasoning. Courses approved in this area have as their primary purpose the
development of the analytical powers of the student as they might be exercised in presentation and
evaluation of mathematical or other formal symbolic systems. Additional information concerning the
goals and content of GE courses can be found at http://www.clas.uiowa.edu/students/handbook/vii/

LECTURES Topics from Chapters 3-28 of the text will be covered. Some additional material will be
presented. Notation, theory, problems, and procedures will be explained in detail. Notes should be taken.
Bring your text, worksheets, and calculator. (Note: some restrictions concerning calculators will be
announced.) ATTENDANCE is required in both the lecture and discussion. Absences usually lead to
lower scores on quizzes and exams.

DISCUSSION SESSIONS Discussion sections will be held once a week (by the TA) on
Tuesday or Thursday. Attendance will be taken. The TA will go over some of the homework, present
sample problems, and answer questions. The TA will return quizzes and exams and present solutions to
the "most missed" problems.

THE CLASSROOM ENVIRONMENT Students have the right to a classroom environment that
encourages learning. Arriving late or leaving early or conversing with fellow students during the
lecture is discourteous and distracting to the instructor and to fellow students.

The learning environment is diminished when students engage in inappropriate classroom behavior such as
reading newspapers or other non-class materials, working on homework, using a cell phone, and using
personal computers for non-class purposes. More information concerning student rights and
responsibilities in the classroom can be found at http://www.clas.uiowa.edu/students/handbook/x/
HOMEWORK will be collected at the beginning of class each Friday (and occasionally, on one of the other days). An assignment sheet listing problems from the text will be given on the course website. Supplemental homework problems will be posted on the website. Both the required textbook problems AND the supplemental problems will be collected. Assignments and due dates will be announced in class and posted on the website.

For each homework problem, show the necessary work and clearly indicate your answer. Include enough detail to demonstrate your method for finding the answer. Sketches and graphs are helpful. All homework should be prepared on 8.5 by 11 inch paper (not torn from a spiral notebook) and should include your name as it appears on ICON (not your ID#), date, and section number printed in INK in the top right hand corner. In addition, you may write your preferred name or nickname in parentheses.

Supplemental homework problems must be completed directly on the pages printed from the website. Suggested formatting instructions for the required textbook problems will be given. The formatting suggestions should give you some idea of the amount of detail to put in your answers. Chapters should be kept separate from each other (for instance, do not start Chapter 4 on the back of Chapter 3, etc.)

Homework papers should be arranged with the supplemental problems placed on top of the textbook problems. Homework must be neat and stapled in the top left hand corner. Use a dark pencil (#2) or a black or blue pen.

Working on homework problems with fellow students is encouraged. However, attempting the problems on your own before working with others is most beneficial. Please note that each student must write up the solutions to the homework problems on his/her own, rather than copying the work of another student.

In general, late homework will be graded as follows:

after the collection of the homework to the Monday after the Friday due date, the paper receives 50\% of the earned score (rounded up to nearest .5); on the Tuesday after the Friday due date, the paper receives 25\% of the earned score; on the Wednesday after the Friday due date (or anytime later), the paper receives 0\% of the earned score.

(If an assignment is due on a day other than Friday, then similar penalties will be applied: after collection to the next weekday, the paper receives 50\% of the earned score; on the second weekday, the paper receives 25\% of the earned score; on the third weekday (or anytime later), the paper receives 0\% of the earned score.)

If you are unable to make it to class on a homework due date, you should arrange to have your homework delivered on time (that is, by the beginning of the class on the due date). Please note that homework will NOT be accepted over email.

QUIZZES (approx. 6) lasting about 15 minutes each will be given in the lectures. Quiz dates (Mondays) and topics will be announced in class the week before. Quizzes consist of several "show your work" type problems. The lowest quiz score for each student will be dropped.

EXAMS will be closed-book & multiple choice. Note: calculators that store non-numerical (text) input will not be allowed on quizzes and exams -- restrictions will be announced. The exams will cover material from the lectures, textbook, and handouts.

EXAM #1 6:30-8:30 PM, Thursday, September 29, in 100 PH
EXAM #2 6:30-8:30 PM, Thursday, November 3, in 100 PH
CUMULATIVE FINAL EXAM 2:15-4:15 PM, Monday, December 12, Room(s) to be announced

The final exam is as scheduled by the university, during finals week. ISIS and the Registrar’s webpage have links to the final exam schedule: http://www.registrar.uiowa.edu/default.aspx
Any changes in the exam schedule will be announced in class and on the course website.
ABSENCES AND MAKE-UPS  If you know that you will miss a quiz or exam, or if something unexpected comes up (emergency, illness, etc.) please let me (instructor) know as soon as possible, prior to the exam, and we will discuss your situation. Please be prepared to show documentation of your situation. Note that not all situations are university approved. Additional information concerning the policy on missed exams and class work can be found at http://www.clas.uiowa.edu/students/handbook/ix/#10

Please note that the University of Iowa returned to its standard class absence policies for illnesses beginning with the spring 2010 semester.

Required forms can be found as follows: Explanatory Statement for Absence from Class http://www.registrar.uiowa.edu/Student/FormsforStudents/tabid/79/Default.aspx

CHEATING in all forms is taken very seriously. It could result in the assignment of an "F" grade and disciplinary action by the college and/or university.

GRADING  The course grade will be calculated using the following weights:

homework = 10%, quizzes = 10%, exam #1 = 25%, exam #2 = 25%, final exam = 30%

The final course % is a weighted sum of HW, quiz, midterm, and final exam grades:

Course % = (HW fraction)(10%)+(quiz frac)(10%)+(E1 frac)(25%)+(E2 frac)(25%)+(final frac)(30%)

As a rough guide: 90-100% = A- to A+, 80-90% = B- to B+, 67-80% = C- to C+, 55-67% = D- to D+

Appointments may be made to discuss your standing in the class. Both plus and minus grades will be used. Note that the grade of A+ is used only in extraordinary situations.

Throughout the semester, grades will be recorded on ICON. If you feel that a grade you have received on a paper or on ICON is incorrect, and you wish to have your paper reviewed, you must contact the instructor and resubmit the paper within 10 days of the first day that the relevant paper was made available in your discussion or the relevant grade was posted on ICON.

HELP is available from a variety of sources: Instructor and TA office hours, review sessions, Statistics Tutorial Lab (202 CC) http://www.stat.uiowa.edu/courses/tutorial-lab.html

For qualified students, tutors are available through New Dimensions in Learning, 310 CALH, 335-1288. In addition, some independent tutors are listed at http://www.stat.uiowa.edu/courses/tutors.html

INFORMATION FOR STUDENTS WITH DISABILITIES  I would like to hear from anyone who has a disability which may require seating modifications or testing accommodations or accommodations of other class requirements, so that appropriate arrangements may be made. Please contact me during my office hours or by email.

DEPARTMENTAL HOME  The Department of Statistics and Actuarial Science is the departmental home of this course. The department office is in 241 SH, web address: http://www.stat.uiowa.edu/ The Departmental Executive Officer (DEO) is Professor Tierney, 241 SH, 335-0712, luke-tierney@uiowa.edu

The College of Liberal Arts and Sciences - Policies and Procedures

The following CLAS policy and procedural statements have been summarized from the web pages of the College of Liberal Arts and Sciences and The University of Iowa Operations Manual.

Administrative Home

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.

**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.)

**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 [www.uiowa.edu/~sds/](http://www.uiowa.edu/~sds/) for more information.

**Academic Honesty**
The College of Liberal Arts and Sciences expects all students to do their own work, as stated in the CLAS Code of Academic Honesty. Instructors fail any assignment that shows evidence of plagiarism or other forms of cheating, also reporting the student's name to the College. A student reported to the College for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

**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.

**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](http://www.uiowa.edu/~sds/) 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. For more information on Hawk Alert and the siren warning system, visit the Public Safety [web site](http://www.uiowa.edu/~sds/).