22S:25/7P:25 (STAT:1020) ELEMENTARY STATISTICS AND INERENCE Fall 2010

TIME/LOCATION Lecture C, 11:30-12:20, MWF, C20 PC
Lecture C Disc. Sections: #31 7:30-8:20, T, 75 SH #35 3:30-4:20, T, 75 SH
#32 (canceled) #36 3:30-4:20, Th, 75 SH
#33 8:30-9:20, T, 151 SH #37 4:30-5:20, T, 131 SH
#34 8:30-9:20, Th, 151 SH #38 4:30-5:20, Th, 131 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. 1:30-2:20, 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

and worksheets/supplements/notes from the course website. Please bring printed copies of the worksheets
to class. Note that one copy of the text 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. Late homework will be penalized.

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 must be neat and stapled in the top left hand corner. Please use a dark pencil (#2) or a black or blue pen for the problems.

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.

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 | 8:00-10:00 PM, Thursday, September 30, in C20 PC |
| EXAM #2 | 8:00-10:00 PM, Thursday, November 4, in C20 PC |

CUMULATIVE FINAL EXAM 12:00 – 2:00 PM, Tuesday, Dec. 14, 2010, 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 will return 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:

\[
\text{Course }\% = (\text{HW fraction})(10\%) + (\text{quiz frac})(10\%) + (E1 \text{ frac})(25\%) + (E2 \text{ frac})(25\%) + (\text{final frac})(30\%)
\]

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](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](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/](http://www.stat.uiowa.edu/)
The Departmental Executive Officer (DEO) is Professor Zimmerman, 241 SH, 335-0712, dale-zimmerman@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 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.

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.

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.

Missed Exam Policy  University policy requires that students be permitted to make up examinations missed because of illness, mandatory religious obligations, certain University activities, or unavoidable circumstances. Excused absence forms are required and are available at the Registrar web site:
http://www.registrar.uiowa.edu/Student/tabid/57/Default.aspx

University Examination Policy Final Examinations  An undergraduate student who has two final examinations scheduled for the same period or more than three examinations scheduled for the same day may file a request for a change of schedule before the published deadline at the Registrar's Service Center, 17 Calvin Hall, 8-4:30 M-F, (384- 4300).