

22S:25/7P:25 **ELEMENTARY STATISTICS AND INFERENCE** **Fall 2009**

TIME/LOCATION **Evening Class (Sec SCA) Wednesday, 6:30-9:30 PM, 151 SH**

INSTRUCTOR **M. Russo** 257 SH, 353-2295, mrusso@stat.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 webpage.

PREREQUISITE 22M:001 (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 webpage. Please bring printed copies of the worksheets to class. Note that one copy of the text has been placed on reserve at the Math Library in MLH.

COURSE TOPICS 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 (GER) 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 GER 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. Attendance will be taken. A missed class is equivalent to a missed week. Absences usually lead to lower scores on quizzes and exams.

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 ability to learn is lessened 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/>

QUIZZES (approx. 6) lasting about 15 minutes will be given during class. Quiz dates 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.

HOMEWORK will be assigned each week. An assignment sheet listing problems from the text will be given on the website. Supplemental homework problems will be posted on the website. Both the review problems from the text and the supplemental problems will be collected. For some assignments, students will work in groups. Assignments and due dates will be announced and posted. Some of the homework will be graded. **Late homework** will be penalized.

For each 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 (not your ID#) and section number printed in the top right hand corner. Homework should be neat and stapled in the top left hand corner -- **chapters should be kept separate** from each other. Supplemental homework problems should be completed directly on the pages printed from the website. Please use a **dark** pencil (#2) or a black or blue pen.

EXAMS will be closed-book & multiple choice (or a combination of "show your work" and 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 Wednesday, September 30, (during class)

EXAM #2 Wednesday, November 11, (during class)

CUMULATIVE FINAL EXAM 4:30 – 6:30 PM, Thursday, Dec. 17, 2009 Room 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/exams/default.aspx>
Any **changes** in the exam schedule will be announced in class and on the course website.

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. Additional information concerning the policy on missed exams can be found at

<http://www.clas.uiowa.edu/students/handbook/ix/#10>

Required forms can be found as follows:

Explanatory Statement for Absence from Class <http://www.registrar.uiowa.edu/forms/absence.pdf>

Class Absence form for Flu-like Illness http://www.registrar.uiowa.edu/forms/H1N1_absence_form.pdf

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 + quizzes = 20%, 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)(HW%)+(quiz frac)(quiz%)+(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. Note that both plus and minus grades will be used.

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 before/after class or during my office hours.

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, 335-0712, luke-tierney@uiowa.edu

The College of Liberal Arts and Sciences - Policies and Procedures

*These 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/ 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/forms/absence.pdf>

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). <http://www.registrar.uiowa.edu/calendars/academic.aspx>

New Campus Wide Flu-like Illness Classroom Absence Policy Please note the following campus wide policy regarding absences due to flu-like illnesses this year:

"Public health authorities have recommended that people with flu-like illnesses stay home and not return to public spaces until 24 hours after they have no fever. In order to prevent the spread of disease, please do not come to class, meet with other groups of students, attend office hours, or contact offices in person while you are ill. Based on this recommendation, I will not require you to report to a doctor or to Student Health to verify a flu-like illness if you are ill, please complete an illness-absence form http://www.registrar.uiowa.edu/forms/H1N1_absence_form.pdf when you are well enough to do so. Your grade will not be penalized for absences if you are following the recommendations of health authorities."