

**22S:25/7P:25 (STAT 1020) ELEMENTARY STATISTICS AND INFERENCE Spring 2012**

**TIME/LOCATION** Evening Class (Sec SCA) Wednesday, 6:30-9:30 PM, 15 SH

**INSTRUCTOR** M. Russo 257 SH, 353-2295, [mrusso@stat.uiowa.edu](mailto: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. 2:45-3:45, 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.** (ISBN: 0-393-92972-8; ISBN: 13-978-0-393-92972-0) and worksheets/supplements/notes from the course website. Please bring printed copies of the worksheets to class. The text is available at the UI Bookstore. 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. A record of attendance will be made. Students who seek assistance from me are expected to have excellent class attendance. Note that a missed class is equivalent to a missed week and 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 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://clas.uiowa.edu/students/handbook>

**QUIZZES** (approx. 6) lasting about 15 minutes each, will be given during the semester. 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 also be posted on the website. Both the required textbook problems and the supplemental problems will be collected. For some assignments, students will work in groups. Instructions for group work will be given in class. 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. Textbook problems should be prepared on 8.5 by 11 inch paper (not torn from a spiral notebook). Supplemental homework problems **must** be completed directly on the pages printed from the website.

Individual submissions should include your name as it appears on ICON (you may write your preferred name or nickname in parentheses), date, and evening section printed in **INK** in the top right hand corner. Group submissions should include a completed cover sheet (available in class). Please **DO NOT** write your ID number on the homework **OR** on the cover sheet.

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. Use a **dark** pencil (#2) or a **black** or **blue** pen for the problems.

Working on homework problems with fellow students can be an enjoyable way to learn and stay involved with the class. 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 any individual (non-group) homework assignment on his/her own, rather than copying the work of another student.

**HOMEWORK QUIZZES** (several) lasting about 15 minutes each, will be given during the semester. Homework quiz dates and topics will be announced in class the week before. HW quizzes consist of problems **VERY** closely related to the homework problems.

**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.

<b>EXAM #1</b>	Wednesday, February 22, (during class)
<b>EXAM #2</b>	Wednesday, April 4, (during class)

**CUMULATIVE FINAL EXAM** DATE/TIME/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://clas.uiowa.edu/students/handbook>

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>

**GRADING** The course grade will be calculated using the following weights:  
 homework + HW quizzes = 10%, quizzes = 10%, exam 1 = 25%, exam 2 = 25%, final exam = 30%

The final course % is a **weighted** sum of HW, HW quiz, quiz, midterm, and final exam grades:  
**Course %** = (HW fraction)(HW%) + (HW quiz fraction)(HW quiz%) + (quiz fraction)(10%) +  
 (E1 fraction)(25%) + (E2 fraction)(25%) + (final fraction)(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 class or the relevant grade was posted on ICON.

**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.

**HELP** is available from a variety of sources: Instructor 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](mailto:luke-tierney@uiowa.edu)

## The College of Liberal Arts and Sciences - Policies and Procedures

### 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 [Academic Policies 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**

All CLAS students have, in essence, agreed to the College's [Code of Academic Honesty](#): "I pledge to do my own academic work and to excel to the best of my abilities, upholding the [IOWA Challenge](#). I promise not to lie about my academic work, to cheat, or to steal the words or ideas of others; nor will I help fellow students to violate the Code of Academic Honesty." Any student committing academic misconduct is reported to the College and placed on disciplinary probation or may be suspended or expelled (CLAS [Academic Policies Handbook](#)).

### **CLAS Final Examination Policies**

The date and time of every final examination is announced during the fifth week of the semester; each CLAS student will receive an email from the Registrar stating the dates and times of the student's final exams. Final exams are offered only during the official final examination period. **No exams of any kind are allowed during the last week of classes.** All students should plan on being at the UI through the final examination period.

### **Making a Suggestion or a Complaint**

Students with a suggestion or complaint should first visit with the instructor (and the course supervisor), and then with the departmental DEO. Complaints must be made within six months of the incident (CLAS [Academic Policies 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](#).