STAT: 4100 (22S:153)  Mathematical Statistics  I  
Spring 2014

Instructor:  Zhiyun Gong

Office:  233 Schaeffer Hall, 335-2847,  zhiyun-gong@uiowa.edu

Class Meeting Time:  MWF 9:30--10:20 am @ 15 SH

Office Hours:  MW 3:30--4:30 pm, TTH 2:00—3:00 pm or by appointment.

Department Information:  Department of Statistics and Actuarial Science, 241 Schaeffer Hall,
Phone: 335-2082,  http://www.stat.uiowa.edu

Department Executive Officer:  Prof. Luke Tierney, DEO, 335-0712,  luke-tierney@uiowa.edu

Course Prerequisites:  The course prerequisites are the mathematics courses 22M: 027 and 22M: 028, or equivalents: undergraduate calculus including linear algebra. Undergraduate students often complete 22S:120 or 22S:130 prior to taking 22S:153.

Textbook:  Introduction to Mathematical Statistics by Robert V. Hogg, Joseph W. McKean and Allen T. Craig (Seventh Edition).  All students taking the course for credit are expected to purchase this text, which is available in the bookstore. The course will closely follow the first four chapters and other selected topics if time permits.

Course Website:  I will post announcements, homework problems, lecture notes, and other course information in ICON  http://icon.uiowa.edu  .

Course Description and Objectives:  This is a course in mathematical statistics intended for upper-level undergraduate students in the mathematical sciences as well as for graduate students in all disciplines. The goal is to provide a solid foundation in the theory of random variables, probability distributions, and convergence in probability and distribution.
**Grading:** Your semester grade will consist of the following components:

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<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Homework</td>
<td>10%</td>
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<tr>
<td>Quizzes</td>
<td>10%</td>
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<tr>
<td>Midterm Exam 1</td>
<td>15%</td>
<td>Tentative date Friday, February 21, in class</td>
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<tr>
<td>Midterm Exam 2</td>
<td>20%</td>
<td>Tentative date Friday, March 28, in class</td>
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<td>Midterm Exam 2</td>
<td>20%</td>
<td>Tentative date Friday, April 25, in class</td>
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<td>Final Exam</td>
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As a rough guide, A,A-=90%-100%, B+,B,B-=80%-90%, C+,C,C-=70%-80%, D+,D,D-=60%-70%.

**Homework:** Homework will generally be made available in ICON on Monday, answer will be due on Friday, and will be discussed in class the following Monday. No homework during the weeks that midterm exams are scheduled or the last week of classes. Due to time constraints, the grader may grade only some of the assigned questions, but you are responsible for understanding all questions. Unless prior arrangements are made well in advance, for reasons judged to be acceptable by me, late homework will receive zero credit as solutions will be posted soon after the homework is due.

**Quizzes:** Quizzes will be frequent and brief. They will emphasize examples and key concepts repeatedly mentioned in class as well as homework problems. Two lowest scores will be dropped in the final grade. The quizzes will be closed book and notes. Calculators may be used on quizzes, and any necessary statistical tables are provided.

**Exams:** There will be three 50-minutes in-class midterms and a two-hour comprehensive final exam. All exams will be closed book and closed notes. Calculators may be used on exams, and any necessary statistical tables are provided. You can bring one 8.5"x11" formula sheets (both sides) for each midterm exam, and four formula sheets for the final exam. If an exam is missed, a make-up exam will be permitted only if the circumstances of missing the exam satisfy university policies (proper documentation will be required in such a case).

**Attendance:** Regular attendance is required.
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 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.