STAT:3101 (22S:131) Section 001, Spring 2013
Introduction to Mathematical Statistics II

Meeting Time  MWF 12:30–1:20 p.m. 140 SH

Instructor    Aixin Tan, 259 SH, 335-0821, aixin-tan@uiowa.edu
Office Hours MWF 1:30-2:20 pm or by appointment

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 course is a continuation of 22S:130. This course gives a mathematical introduction to the foundations of statistical inference. We will discuss methods for using observed data from a sample to estimate parameters, test hypotheses about the data-generating distribution, and estimate/predict unobserved data. The methods developed will be applied in a variety of single sample, multiple sample, and regression settings. We will cover most of the topics from Chapters 5 through 8 of Hogg and Tanis. Topics include sampling distribution theory, maximum likelihood estimation, confidence intervals, linear regression, hypothesis tests, and non-parametric methods. Time permitting, we will cover select topics from Chapters 9 and 10.

Course Prerequisite: 22S:130 (Introduction to Mathematical Statistics I) or equivalent.


Grading. Your semester grade will consist of the following components:

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Quizzes</td>
<td>10%</td>
</tr>
<tr>
<td>Midterm Exam 1</td>
<td>20%</td>
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<tr>
<td>Midterm Exam 2</td>
<td>20%</td>
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<tr>
<td>Final Exam</td>
<td>35%</td>
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<tr>
<td>Total</td>
<td>100%</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%.

Quizzes and Exams. Quizzes will be brief. They will emphasize examples and key concepts repeatedly mentioned in class as well as homework problems. All exams will be closed book. The final exam will be comprehensive.

Attendance is required.

Prof. Tierney, DEO, 335-0712, luke-tierney@uiowa.edu
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.