STAT 4101 (22S:154) Mathematical Statistics II

Spring 2013

Instructor: Javier Suarez Espinosa, 217 SH, Phone: 335-2847
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DEO: Prof. Luke Tierney, Chairman.
Department of Statistics & Actuarial Science, 241 SH,
Phone: 335-0712

Lectures: MWF 11:30A –12:20P, 40 SH

Office hours: MWTh 10:00P –11:00P, 217 SH
or by appointment

Grader: Weichein, Gao, Office: 366 SH,
E-mail: willa.gwc@gmail.com

Prerequisite: 22S:153 (STAT: 4100)


About the course: This course is a continuation of 22S:153. It is intended for upper-level undergraduate students in the mathematical sciences as well as for graduate students in all disciplines. The goal is to give students a solid foundation in the theory and methods of statistical inference. Topics include convergence in probability and convergence in distribution, as well as point estimation, confidence intervals, and testing of statistical hypotheses.

Class meetings: Please do not arrive late or leave early. The course contains too much material to cover in class. I will try to cover the main ideas, point out subtleties and to provide a framework.

Attendance: Attendance is required. Students are responsible for all material covered in the lectures.

Grading System: The following system will be used to determine course grades:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>10%</td>
</tr>
<tr>
<td>Quizzes (4)</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm (2)</td>
<td>40%</td>
</tr>
<tr>
<td>Final</td>
<td>30%</td>
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A plus-minus grading system will be used. As a rough guide: Overall score 90% => A- or up, 80% => B- or up, 70% => C- or up)

Homework: HW will be assigned on Fridays and due on the following Friday at the beginning of the class, unless prior arrangements are made. Late HW will be penalized. You are encouraged to discuss HW problems with other students; however, what you hand in must ultimately be your own work.

Exams: There will be two 50-minutes exams and one two-hour cumulative final exam. The examination will be closed book and closed notes. Calculator may be used for exams, and any necessary statistical tables will be provided. Two 8.5”x11” formula sheets (both sides) may be used for each exam. If an exam
When an exam is missed, a make-up exam will be permitted only if the circumstances of missing the exam satisfy university policies.

1. **Midterm One**: Friday, March 01; 11:30A – 12:20P, 40 SH
2. **Midterm two**: Friday, April 05; 11:30A – 12:20P, 40 SH
3. **Final**: To be determined

**Quizzes**: There will be four closed-book 15-minutes quizzes at the end of class period (lowest score dropped). The quizzes will be closed book and closed notes. Calculator maybe used for quizzes and any necessary statistical tables will be provided.

1. **Quiz one**: Friday, February 08
2. **Quiz two**: Friday, March 15
3. **Quiz three**: Friday, April 19
4. **Quiz four**: Friday, May 03

**Students with disabilities**: I would like to hear from anyone who has a disability which may require seating or testing accommodations, or accommodations for other class requirements, so that appropriate arrangements may be made. Please contact me during my office hours.

**Policies**: Course policies are governed by the College of Lib Arts and Sciences.

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**The College of Liberal Arts and Sciences Policy and Procedures**

*Academic Fraud*. Plagiarism and any other activities that result in a student presenting work that is not his or her own are academic fraud. Academic fraud is reported to the departmental DEO and then to the Associate Dean for Academic Programs and Services in the College of Liberal Arts and Sciences. [www.clas.uiowa.edu/students/academic_handbook/ix.shtml](http://www.clas.uiowa.edu/students/academic_handbook/ix.shtml)

*Making a Suggestion or a Complaint*. Students have the right to make suggestions or complaints and should first visit with the instructor, then with the course supervisor if appropriate and next with the departmental DEO. All complaints must be made within six months of the incident. [www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5](http://www.clas.uiowa.edu/students/academic_handbook/ix.shtml#5)

*Accommodations for Disabilities*. A student seeking academic accommodations first must register with Student Disability Services and then meet with a SDS counselor who determines eligibility for services. A student approved for accommodations should meet privately with the course instructor to arrange particular accommodations. [www.uiowa.edu/~sds/](http://www.uiowa.edu/~sds/)

*Understanding Sexual Harassment*. Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. Visit [www.sexualharassment.uiowa.edu/](http://www.sexualharassment.uiowa.edu/) for definitions, assistance, and the full policy.

*Administrative Home of the Course*. The administrative home of this course is the College of Liberal Arts and Sciences, which governs academic matters relating to the course such as the add / drop deadlines, the second-grade-only option, issues concerning academic fraud or academic probation, and how credits are applied for various CLAS requirements. Please keep in mind that different colleges might have different policies. If you have questions about these or other CLAS policies, visit your academic
advisor or 120 Schaeffer Hall and speak with the staff. The CLAS Academic Handbook is another useful source of information on CLAS academic policy:

www.clas.uiowa.edu/students/academic_handbook/index.shtml

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).

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: www.registrar.uiowa.edu/forms/absence.pdf

Reacting Safely to Severe Weather. The University of Iowa Operations Manual section 16.14 outlines appropriate responses to a tornado (i) or to a similar crisis. If a tornado or other severe weather is indicated by the UI outdoor warning system, members of the class should seek shelter in rooms and corridors in the innermost part of a building at the lowest level, staying clear of windows, corridors with windows, or large free-standing expanses such as auditoriums and cafeterias. The class will resume, if possible, after the UI outdoor warning system announces that the severe weather threat has ended.