

# Mathematical Statistics II, 22S:154, Spring 2007

January 17, 2007

**Instructor:** Jun Yan

jyan@stat.uiowa.edu (*NOT* jun-yan@uiowa.edu, which belongs to someone else)  
<http://www.stat.uiowa.edu/~jyan/>  
 219 SH  
 319/335-0824

**Department:** Statistics and Actuarial Science

<http://www.stat.uiowa.edu/>  
 241 SH  
 M–F 8:30a–12:00p, 1:00p–4:30p

**DEO Contact:** Luke Tierney

luke-tierney@uiowa.edu  
 241 SH  
 319/335-0712

**Lectures:**

- MWF 10:30a–11:20a 74 SH

**Office Hours:** MW 11:30a–12:20p, Th 4:40–5:30 (or by appointments)

**ICON:** <http://icon.uiowa.edu/>

- Log in using your Hawk ID and Hawk ID password.
- Please do *NOT* submit homework through ICON.

**Course Description:** This course covers statistical inferences built upon the theory of probability. Topics include maximum likelihood methods, sufficient statistics, confidence intervals, hypothesis testing, inferences about normal models, Bayesian estimator, etc.

**Prerequisite:** 22S:153 or equivalent.

**Textbook:** Hogg, McKean, and Craig (2004), *Introduction to Mathematical Statistics*, 6th Edition, Pearson Prentice Hall. ISBN 0-130-085-073.

Chapters 5, 6, 7, 8, and 11 of the textbook will be covered in this course. Time permitting, Chapter 9 and 10 will be selectively covered.

**Grading:** Assessment of the subject will be based on the following four components with weights shown in parenthesis:

**Style (5%)** I expect almost everyone to receive all five points. If my grader or I had to reread a solution several times to find a train of thought, or if a solution was illegible, ambiguous, or incoherent, it would affect Style Points.

**Homework (15%)** Homework will be assigned weekly and must be turned in at the beginning of the class on the following Friday. Please do not merely write down answers, but clearly show how you got your results.

Only the best 10 homework grades will count toward your grade.

Late homework will *NOT* be accepted for any reason.

You are encouraged to discuss homework problems, but you must write up the solutions independently. No credit will be given to assignments that are substantially similar.

**Quizzes (20%)** There will be five 15 minutes in-class quizzes. They will be on weeks 2, 4, 8, 10, and 14 (The week of Spring recess is excluded).

Only the best 4 quizzes will count toward your grade.

Missed quizzes cannot be made up.

**Exams (60%)** The two 90-minute midterm exams (30%) are in week 6 and 12, respectively.

The 90-minute cumulative final exam (30%) is on Tuesday, May 8, 2007, starting at 12pm.

If you have two exams scheduled for the same period or more than three exams scheduled for the same day, you may file a change of schedule at the Registration Center (meeting the deadline is your responsibility).

Missed exams may be made up only with documentation of reasons required by the university policy, i.e. because of “illness, mandatory religious obligations, or other unavoidable circumstances or University activities.”

You will be allowed to consult one single-sided 8.5×11 notes during each quiz, two single-sided 8.5×11 notes during each midterm exam, and four single-sided 8.5×11 notes during the final exam.

**Important Dates:** Please mark your calendar.

Date	Event
Friday, 01/26	Quiz 1
Friday, 02/09	Quiz 2
Thursday, 02/22 (6pm)	Midterm 1
Friday, 03/23	Quiz 3
Friday, 04/06	Quiz 4
Thursday, 04/19 (6pm)	Midterm 2
Friday, 05/04	Quiz 5
Tuesday, 05/08 (12pm, 74 SH)	Final exam

**Course Schedule:** The course schedule will be posted in ICON progressively.

#### University Policies:

- Course policies are governed by the College of Liberal Arts and Sciences.
- University policies regarding Student Rights and Responsibilities can be found at <http://www.clas.uiowa.edu/students/academic.handbook/>.
- I would like to hear from anyone who has a disability which may require some modification of seating, testing, or other class requirements so that appropriate arrangements may be made. Please see me about this as soon as possible.

#### Notes:

- A student is expected to spend a minimum of two hours outside of class for each class period to successfully learn the course material. Some may need more. When you do not put time, you will not learn.
- Do not wait until the night before the due date to start doing your homework.
- Working exercises is THE major way to assess your understanding and to solidify concepts. You cannot learn how to solve problems by merely watching someone else do them — you must solve problems on your own. Doing all the exercises is recommended.
- A list of independent tutors can be found at <http://www.stat.uiowa.edu/courses/tutors.html>.
- Chinese students please speak English in an academic environment.
- Bring any difficulties to me promptly.