

STAT:7101 (22S:254) Advanced Inference II
Spring, 2014

1. Instructor: Kung-Sik Chan SH 263 335-2849 kung-sik-chan@uiowa.edu

office hours: MWF 11:00–12:00 or by appointment.

2. Department: Statistics and Actuarial Science
DEO contact information (Luke Tierney, 241 SH, 335-0712,
luke-tierney@uiowa.edu)

3. Time and location of class: 9:30am - 10:20pm MWF SH150

4. Textbooks:
Asymptotic Statistics by van der Vaart

Chapters to be covered: 11-16, 18-20 and 23 in Asymptotic Statistics. We aim to give an introduction to some further results on the central limit theorems, empirical process theory and its applications to statistics. If time permits, we shall cover some aspects on the asymptotics for regularization methods including LASSO.

5. Prerequisite: 22S:253 Advanced Inference I or equivalent.

6. Course requirements:

	date	percent
Homework		15%
Exam 1	Feb, 28 (Friday)	35%
Exam 2	Apr, 30 (Wednesday)	35%
Project report	to be determined	15%

Several homework assignments will be given. Discussion with fellow students on the exercises of the homework is allowed. Exams are open book. Towards the end of the semester, I'll provide the class a list of papers that make use of the materials taught in the class. Each student will be assigned one paper out of the list. Each student then reads the paper and submits a report on the paper; the report should not be more than 15 pages long. The report should state the main results of the paper, explain the basic ideas regarding the new concepts and the main proofs, supply any missing technical details, and provide a comment on the contribution and generalization of the derived results. The student is also required to present his/her report on the date of the final examination (to be determined).

7. Grading policy: Your grade for this course will be assigned according to the following *approximate* scale:

90	to	100	A
80	to	89	B
70	to	79	C
60	to	69	D
0	to	54	F

This scale is not absolute, and the cutoff points may vary depending on the difficulty of the exams. Also, borderline cases may receive a + or -. The College and EPC ask that the A+ grade be used only in extraordinary situations.

8. Students are expected to attend every class unless for documented reasons including sickness or unavoidable circumstances. See <http://www.clas.uiowa.edu/faculty/teaching/attendance.shtml> for the CLAS policies on attendance.
9. Internet Resources My home-page <http://www.stat.uiowa.edu/~kchan/S235.htm> provides some links to useful Internet resources related to our course.
10. Miscellaneous:

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 Honesty The College of Liberal Arts and Sciences expects all students to do their own work, as stated in the CLAS Code of Academic Honesty. Instructors fail any assignment that shows evidence of plagiarism or other forms of cheating, also reporting the student's name to the College. A student reported to the College for cheating is placed on disciplinary probation; a student reported twice is suspended or expelled.

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.