

## **MAT 652: Probability and Statistics II (Spring, 2013)**

**Course Description:** The course will cover central ideas of statistical inference: point/interval estimation and hypothesis testing. The primary objective of the course is to learn basic concepts and theory of statistical inference. Topics covered include principles of data reduction, methods of finding and evaluating estimators, and methods of finding and evaluating tests.

### **Instructor**

Professor H. Hyune-Ju Kim, 304E Carnegie  
443-1494, 443-1471(message)  
hjkim@syr.edu

Class Hours TTh 11:00 a.m. -12:20 p.m.  
Office Hours M 11a.m.-12 a.m., T 1:00 p.m.-2:00 p.m.

**Text :** *Statistical Inference*, by George Casella and Roger L. Berger, 2<sup>nd</sup> edition, Duxbury

**Grading Policy :** Midterm Exam (35%), Final Exam (45 %), Homework (10 %), Reading Assignment and presentation (10%)

**Prerequisite:** Calculus, MAT 651 or equivalent

**Course Schedule :** Chapters 5-9 and some additional topics will be covered.

- \*\* Midterm (in Class): March 7 (Thursday)
- \*\* Final Exam: May 3 (Friday), 5:15p.m.-7:15p.m. (possibly until 8:15 p.m.)
- \*\* Readings of selected articles will be assigned as the course progresses. A short report is required for each reading assignment. In the middle of the semester, students are asked to choose a topic among recently developed inferential methods, and will be asked to present a summary of their research during the last two classes.

### **References**

Bickel and Doksum (2001), *Mathematical Statistics*, Vol. 1, 2<sup>nd</sup> edition, Prentice Hall  
Cox and Hinkley (1974), *Theoretical Statistics*, Chapman and Hall  
E.L.Lehmann (1983) ,*Theory of Point Estimation*, Wiley  
E.L.Lehmann (1988), *Testing Statistical Hypothesis*, Wiley  
Dudewicz and Mishra (1988), *Modern Mathematical Statistics*, Wiley

**Students with Disabilities:** If you believe that you need accommodations for a disability, please contact the Office of Disability Services (ODS), <http://disabilityservices.syr.edu>, located in Room 309 of 804 University Avenue, or call 315-443-4498 for an appointment to

discuss your needs and the process for requesting accommodations. ODS is responsible coordinating disability-related accommodations and will issue students with documented disabilities Accommodation Authorization Letters, as appropriate. Since accommodations may require early planning and generally are not provided retroactively, please contact ODS as soon as possible. You are also welcome to contact me privately to discuss your academic needs although I cannot arrange for disability-related accommodations.

**Academic Integrity:** The Syracuse University Academic Integrity Policy holds students accountable for the integrity of the work they submit. Students should be familiar with the Policy and know that it is their responsibility to learn about instructor and general academic expectations with regard to proper citation of sources in written work. The policy also governs the integrity of work submitted in exams and assignments as well as the veracity of signatures on attendance sheets and other verifications of participation in class activities. Serious sanctions can result from academic dishonesty of any sort. For more information and the complete policy, see <http://academicintegrity.syr.edu>.