Statistics 442 Section 1: Probability and Statistics II: Statistics  
Spring, 2015

Time: M W F 10:20am–11:10am  
Place: A328 Wells Hall  
Instructor: Chae Young Lim  
Office: C426 Wells Hall  
Telephone: 353-7154  
E-Mail: lim@stt.msu.edu  
Website: please log on d2l.msu.edu  
Office Hours: M W 12:00pm-1:00pm, Tu 9:00am-10:00am, or by appointment  
References: -Modern Mathematical Statistics with Applications by Devore and Berk  
-The Analysis of Time Series: An Introduction, by Chatfield  
Prerequisite: (MTH 309 or MTH 314 or MTH 415) and STT 441, or equivalent courses.

STT 442 is a course for students with at least four courses in calculus or higher level mathematics. In particular, students should have had (or take concurrently) a course on linear algebra.

The specific topics of the course include point estimation, interval estimation, hypothesis testing, likelihood method, nonparametric methods, linear models, time series and other topics. The course will cover Chapters 1–6 briefly, Chapters 8,9, 11–14 and lecture notes on time series. We will use a statistical package R that will help us to perform various tests, regression analysis and time series analysis. R is a freeware that you can download at http://www.r-project.org. Some introductory materials are available at the course website.

Homework: There will be six homework assignments during the semester. There will be some problems using the statistical software package R. The lowest homework score will be dropped.

Quizzes: There will be six 20-minute quizzes during the semester. Quiz questions will be based on homework problems and the examples given in class. The lowest quiz score will be dropped. The tentative quiz schedule is:

Quiz 1: Jan 23; Quiz 2: Feb 6  
Quiz 3: Feb 27; Quiz 4: Mar 20  
Quiz 5: Apr 10; Quiz 6: Apr 24
Examinations: There will be two 50-minute midterm exams and a comprehensive two hour final exam. The Midterm exams dates are (tentatively):

Midterm 1 Feb 13
Midterm 2 Mar 27

A comprehensive Final exam will be given on Wednesday, May 6, 10:00-12:00 noon.

If you are unable to take an exam, you must contact the instructor before the exam. All excuses must be verifiable. The make-up exams and quizzes will be given only under exceptional circumstances.

Attendance: Students’ attendance will be checked in class randomly without any prior notice. Students will receive a total 5% extra credit for attendance.

Course Grade: The final grade is determined from homeworks, quizzes, two midterms and one comprehensive final exam. The relative weighting is: homework, 15%; quizzes, 25%; mid-terms, 30% (15% each) and final exam 30%.

The grading scale will be as follows:

90–100%: 4.0; 80–89%: 3.5
70–79% : 3.0; 60–69%: 2.5
50–59% : 2.0; 40–49%: 1.5
30–39% : 1.0; 0–29% : 0.0

Academic Honesty: The Department of Statistics and Probability adheres to the policies of academic honesty as specifies in the General Student Regulations 1.0, Protection of Scholarships and Grades. Student who plagiarize will receive a grade 0.0 on the assignment.

Remark: The instructor reserves the right to make any changes she deems academically advisable.

Important Dates for Spring Semester 2015

• Jan. 12 First day of classes; late enrollment fee begins
• Jan. 16 Close of online add period
• Jan. 19 No class- Martin Luther King Day
• Mar. 9-13 Spring Break
• May 1 Last Day of Classes
• May 6 Final exam