STT 442: Probability and Statistics II: Statistics  
Spring Semester, 2010

Time and Place:    M-W-F 10:20–11:10AM  C108 Wells Hall  
Instructor:   Dr. Yimin XIAO  
Office:   A-437 Wells Hall  
Phone Number and E-Mail:  432-5411 xiao@stt.msu.edu  
Office hours: M W F 3:00–4:00PM, or by appointment.


Coverage: We intend to cover selected parts of Chapters 6–9, Chapter 11, 13, 14 of Rice’s book and an extra chapter on time series.

Prerequisite: STT 441 and (MTH 309 or MTH 314 or MTH 415).

The purpose of this course is to teach the students basic statistics principles and techniques. This is an important prerequisite for several statistics classes and a required course for a number of technical disciplines. The basic components of the course include: Estimation, testing hypotheses and simple and multiple regression analysis. Time series: ARMA (Auto Regressive Moving Average) and ARIMA (Auto Regressive Integrated Moving Average) models, data analysis and forecasting.

This course is demanding and requires a great deal of work. Students are responsible for all material covered in class. Students are expected to attend each class period and to bring their textbook.

Homework: Homework will be assigned regularly during Monday’s lecture. Students are expected to complete their homework on time. It is absolutely essential to keep up with the homework assignments.

Quizzes: There will be six 15-minute quizzes given during this semester. The quizzes are designed to practice the material taught in the lecture and help you to develop problem-solving skills. There will be no make up quizzes. The lowest quiz score will be dropped. The quizzes will be given in class on the following Fridays:

January 22, February 5, February 19, March 26, April 9, April 23
Exams:

- The mid-term will be given in class on Friday, March 5, 2010.
- The final is a 2-hour exam and will be comprehensive. It will be given during 10:00–12:00 noon on Thursday May 6, 2010.

The final grade will be determined from your mid-term exam, final exam, quizzes and homework. The relative weighting is: Midterm exam, 30%; Final Exam, 40%; Quizzes, 15%; Homework, 15%.

The grades will be given roughly according to the following scheme:

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Important Dates:

- January 11: First day of classes
- January 18: Martin Luther King Day (No classes)
- February 4: End of 100% tuition refund
- March 3: Middle of the semester, last day to drop with no grade
- March 8–12: Spring Break
- April 30: Last day of classes
- May 3–7: Final exam week

**ADA Statement**  The Americans with Disabilities Act requires that reasonable accommodations be provided for students with physical, sensory, cognitive, systemic, learning, and psychiatric disabilities. Please contact me at the beginning of the quarter to discuss any such accommodations for the course.