

STT 351: Probability and Statistics for Engineering Fall Semester, 2010

Time and Place: M-W-F, 10:20AM –11:10AM; 351 Natural Sciences Bldg

Instructor: Dr. Yimin XIAO

Office: A-437 Wells Hall

Phone Number and E-Mail: 432-5411 xiao@stt.msu.edu

Office hours: 2:50 – 3:40pm, M W F or by appointment.

Text: Jay Devore, *Probability and Statistics for Engineering and the Sciences*, 7th Edition, Brooks-Cole, 2008.

Coverage: The textbook will be followed fairly closely. We intend to cover selected parts of Chapters 1–9, Chapter 12; and Chapters 10–11, time permitting.

Prerequisite: (MTH 234 or MTH 254H or LBS 220)

This course provides a comprehensive introduction to the concepts of probability and basic statistics. Students will learn the theory behind statistical decision making, as well as how to implement statistical techniques for various applications. Students will appreciate the value of statistics in their personal and professional lives. Students will also learn how to utilize Minitab for statistical calculations.

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 text and a calculator.

Homework: Homework will be assigned regularly in the lecture. Students are expected to complete the 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 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 from 10:55–11:10AM on the following Fridays:

September 10, September 24, October 8, October 29, November 12, December 3

Exams: There will be two mid-term exams and a final exam. The final is a 2-hour exam and will be **comprehensive**. The tentative schedule is as follows:

- Midterm 1 – Monday, October 11, in class.
- Midterm 2 – Monday, November 22, in class.
- Final Exam – Wednesday, December 15, 10:00–12:00 noon.

The final grade will be determined from your mid-term exams (100 points each), final exam (200 points), quizzes (total 50 points) and homework (total 50 points). In other words, the relative weighting is: Midterm exams, 40 %; Final Exam, 40 %; Quizzes, 10 %; Homework, 10%.

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

Percentage (%)	91–100	86–90	80–85	71–79	66–70	58–65	51–57	50 ↓
Grade	4.0	3.5	3.0	2.5	2.0	1.5	1	0

Important Dates:

- September 1 First day of classes
- September 6 Labor Day, University closed
- September 27 End of 100% tuition refund
- October 20 Middle of the semester
- November 25–26 Thanksgiving Recess
- December 10 Last day of classes

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.