STT 351: Probability and Statistics for Engineering

Time and Place: M-W-F, 11:30AM – 12:20PM; C103 Wells Hall

Instructor: Dr. Yimin XIAO

Office: A-437 Wells Hall

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

Office hours: 1:00 - 1:50pm, M W F or by appointment.


Coverage: The textbook will be followed fairly closely. We intend to cover selected parts of Chapters 1–8, Chapter 11; and Chapters 9–10, 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 12:05–12:20PM on the following Fridays:

January 21, February 4, February 25, March 18, April 1, April 22
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 – Friday, February 11, in class.
- Midterm 2 – Friday, March 25, in class.
- Final Exam – Friday, May 6, 10:00-12:00 noon.

The final grade will be determined from your mid-term exams, final exam, quizzes and homework. 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:

<table>
<thead>
<tr>
<th>Percentage (%)</th>
<th>91–100</th>
<th>86–90</th>
<th>78–85</th>
<th>71–77</th>
<th>66–70</th>
<th>58–65</th>
<th>51–57</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade</td>
<td>4.0</td>
<td>3.5</td>
<td>3.0</td>
<td>2.5</td>
<td>2.0</td>
<td>1.5</td>
<td>1</td>
<td>0</td>
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Important Dates:

- January 10 First day of classes
- January 14 Close of Adds
- January 17 Martin Luther King Day, classes cancelled
- February 4 End of tuition refund
- March 2 Middle of the semester
- March 7–11 Spring Break
- April 29 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.