STT 861, Theory of Probability and Statistics I
Fall 2013

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Office Hour: M W 9:10 - 10:10 a.m., or by appointment

Time: M W F 10:20 - 11:10 a.m.
Place: A234 Wells Hall

Website: Course page at angel.msu.edu.


Recommended Background: linear algebra (MTH 309), multivariate calculus (MTH 234) or equivalent courses

Course Outline:

STT 861 is a graduate course on probability theory, which covers the fundamental probability concepts and techniques for future study of more advanced statistics courses. We will cover Chapter 1 to 5 in the textbook (If time permits, Chapter 9 in will also be covered). Specific topics includes: probability models, conditional probability, independence, random variables, density and cumulative distribution functions, joint distributions, expected values and variance, moment generating functions, limit theorems.

It is crucial that a student make sure that he/she has a working knowledge of linear algebra (MTH 309) and multivariate calculus (MTH 234) before enrolling in this course.

Problem sets of various types will be assigned. Students should work out their own assignments and exams, although discussion of problems in problem sets is encouraged.
Exam Dates:

October 4, Friday, Midterm I (in class)

November 8, Friday, Midterm II (in class)

December 10, Tuesday, 10:00-12:00 noon, Final Exam (in class)

Grading: The final grade is based on

a  Problem Sets 20%

b  2 Mid-Term Exams 40%

c  Final Exam 40%

The grading scale will be roughly as follows:

4.0  90-100%

3.5  80-89%

3.0  70-79%

2.5  65-69%

There will be NO makeup exam under any circumstances.

Tips for getting good grades:

1. Attend every class and take notes.

2. Don’t be afraid to ask questions.

3. Use office hours.

4. Form a study group.

5. Focus on the examples in the lectures.

6. Understand the concepts and the logic rather than merely memorize the formula and the procedures.

The instructor reserves rights to make necessary changes for the course any time during the semester. The students is responsible for keeping up with changes in the course.