Professor: Jonathan Taylor  
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Office Hours: MW 11:00-12:00  

Crosslisted as: MATH 105, SYMBSYS 116.  

Goals of the course: After completing the course, students will be familiar with the following ideas  
  • axioms and basic definitions of probability  
  • computing probabilities when outcomes are equally likely, basic combinatorics  
  • independence & conditional probabilities  
  • random variables  
  • discrete random variables, special distributions  
  • continuous random variables, special distributions  
  • expectation & variance of a random variable  
  • weak law of large numbers  
  • central limit theorem  

Prerequisites: Advanced calculus. Familiarity with infinite series, limits, double integrals. Note: Even though the first part of the course does not require calculus, the later parts really heavily on calculus! Consider yourself warned!

General format: MTWTh: Lecture. F: Tutorial session


Evaluation:
- 9 assignments - 30%
- 2 midterm exams:
  - 5% \times \min(\text{midterm}_1, \text{midterm}_2)
  - 25% \times \max(\text{midterm}_1, \text{midterm}_2)
- final exam - 40%

Calculators: Calculators are permitted for midterms and final exams for numerical calculations only.

Assignment policy: Since solutions will be posted on the web. No late assignments will be accepted. Assignments are due at the beginning of the class on the date they are due. Students should also try other problems in the text.