

**SYLLABUS MATH 4640/6640**  
**INTRO TO Probability Models**  
**Fall 2014**

INSTRUCTOR: Dr. D. Bowman Armstrong  
357 Dunn Hall  
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Office hour: MW 11:30 – 12:30

REQUIRED TEXTBOOK: Introduction to Probability Models by Sheldon Ross  
I will use the 11<sup>th</sup> edition.

TOPICS COVERED:

Review of probability theory, Random variables – discrete and continuous

Conditional probability and conditional expectations

Discrete time Markov Chains, Chapman-Kolmogorov equations, classification of states, limiting probabilities

Exponential Distribution and Poisson process with generalizations

Continuous time Markov Chains, birth and death processes

Other topics as time permits.

EVALUATION: There will be 3 in class tests and a comprehensive final exam. Each test will count 1/4 of the student's grade. The student's final grade in the course will be determined by the percentage of the total possible points received according to the following scale:

Percentage	Grade
90-100%	A
80-89%	B
70-79%	C
60-69%	D
below 60%	F

There will be **NO MAKEUP TESTS** given. If a student must miss a test, the final exam grade can be substituted for the test with the permission of the instructor. If a student misses more than one exam, the first exam can be replaced with the final exam grade but the second missed exam will be given a grade of zero. It is thus vital that a student miss no more than ONE exam.

HOMEWORK: Homework will be assigned from each section and homework problems will be discussed in class. It is important for students to complete homework assignments but they will NOT be submitted for grading.

STUDENT DISABILITY POLICIES, ACCOMODATION AND SERVICES: Information available at [www.memphis.edu/sas](http://www.memphis.edu/sas)

ACADEMIC MISCONDUCT: The university policy is available at [www.memphis.edu/studentconduct/misconduct.htm](http://www.memphis.edu/studentconduct/misconduct.htm)

The professor reserves the right to make any necessary changes to the information provided in the syllabus during the term.