STA 320.01
Probability
Fall Semester, 2008
Monday Wednesday Friday 10:00 AM–10:50 AM
Room CB 233

Instructor:	Ruriko Yoshida
Office:	805A POT
E-mail:	ruriko@ms.uky.edu
Office hours:	Monday Wednesday 2:00-3:00 PM
	(I'm usually available to talk whenever I'm in my office so
	feel free to drop in, except two minutes before class starts.)

| Text: | "Introduction to Probability and Its Applications" Second Edition by Richard L Scheaffer. |

Overview: This is a course on theory of probability. In this course you will learn the nomenclature, theory and techniques needed for understanding the major types of probability problems, how to apply them in mathematical modeling, and how to prove problems in probability. We will cover materials including (not limited to) sample space, random variables, distribution functions, conditional probability and independence, expectation, combinatorial analysis, generating functions, convergence of random variables, characteristic functions, laws of large numbers, central limit theorem and its applications. This is an undergraduate course so if you think it is an easy course please talk to me.

Course Website: All course materials (including the homework assignments) will be posted on the class website,

`https://www.polytopes.net/courses/Stat320F08/`

Homework: Assignments will be weekly, handed out on Friday and due back the next Friday. Typically these assignments contain 5 or 6 regular problems. assignments will be graded and returned and credits will be given **only** if an answer is completely correct. If you have an incorrect answer, the problem will be returned to you with some hints and you will be required to turn it in again with the next set of homework. This will be repeated until the answer is correct.

While you are welcome to work together on the assignments, the final writeups should be your own. In the writeups, indicate your calculations and reasoning for all the work submitted. For numerical answers, draw a box around your answer and use four significant figures for approximations unless the answer is an integer, or instructed otherwise in the problem statement.

Homework will be graded on a ten point scale 0 meaning that you did not turn in the homework and 10 meaning that Athena, goddess of wisdom could not have completed the assignment any better. **ABSOLUTELY NO LATE homework**.

Before handing in your homework paper, please **staple** all papers together and clearly write your name and the assignment number on the first page. Turn in papers held together by paper clips or origami at your own risk.

The lowest homework score of each semester will be thrown out. This is basically to handle those emergencies where you are unable to complete an assignment for external reasons. I strongly recommend you save this freebie as long as possible and do not blow off an early assignment.

Tests: There will be 2 midterms during the semester, both in class. They will test your ability to recall key definitions and theorems from the class, and apply them to simple problems. In addition, there will be a final exam roughly twice the length of the midterms.

Grading: The regular problems of the homework are worth 30% of your grade, midterm 1 is 20%, midterm 2 is 20%, and the final will be 30%.

Schedule: The following is a tentative schedule. This is atemporary so it might be changed (with a high probability).

Week	Topic	Section
August 27 to September 22	Basic Probability	Chapter 2
September 24 to October 6	Discrete Probability Distributions	Chapter 3
October 8	Review	
October 10	First Midterm	
October 13 to October 27	Continuous Probability Distributions	Chapter 4
October 29 to November 14	Multivariate Probability Distributions	Chapter 5
November 19	Review	
November 21	Second Midterm	
November 26 to 28	Thanks-giving holiday	
December 1 to 5	Buffer	
December 16, Tue, 1:00pm	Final	