

CS 3341-501: Probability and Statistics in CS (Spring 2005)
Course Information and Syllabus

Goal: Learn some basic probability and statistics useful in computer science.

Text: *Probability and Statistics with Reliability, Queuing and Computer Science Applications*, 2nd edition, K. Trivedi, John Wiley, 2002. For reference, you can also use *Concepts in Probability and Stochastic Modeling*, Higgins, J. J. and Keller-McNulty, S., Duxbury, 1994. (Both books will be available on reserve in the library.)

Class: MW 5.30-6.45p.m., ECSS 2.412.

Instructor: Pankaj Choudhary, ECSN 3.908, 972-883-4436, pankaj@utdallas.edu

Office hours: MW 4.00-5.00 p.m. or by appointment

Course website: http://www.utdallas.edu/~pankaj/cs3341_501_spring05/

The skeleton notes, homework assignments, their solutions and the announcements will be posted here. *Please bring a printout of the skeleton notes for each class.*

Teaching assistant: To be announced on the course website.

Grading: Homework: 20% (7-8 with equal weight; the lowest two scores will be dropped)
 Midterm 1: 15% (in class, Feb 2)
 Midterm 2: 25% (in class, Mar 16)
 Simulation project: 10% (more information will be provided later)
 Comprehensive final: 30% (April 27, Wed, 5-7.30pm in our regular classroom)

No make-up exam will be given unless there is an absolute emergency and appropriate official documentation is provided. No late HW will be accepted.

Tentative syllabus: (Topics, their coverage and their order can be changed at my discretion.)

	Chapter	Sections
Jan 10-Jan 31	1 (Introduction)	All
Midterm 1, Feb 2		
Feb 7-Feb 14	2 (Discrete random variables)	2.1-2.6, 2.8-2.9
Feb 16-Feb 23	3 (Continuous random variables)	3.1-3.5, 3.6, 3.8-3.9
Feb 28-Mar 14	4 (Expectation)	4.1-4.3, 4.5-4.7
Midterm 2, Mar 16		
Mar 21-Apr 6	10 (Statistical Inference)	10.1-10.3
Apr 11-Apr 18	11 (Regression)	11.1-11.7
Apr 20-Apr 25	6 (Stochastic processes)	6.1-6.4
Apr 27, Final		