Guidelines for Final: Friday December 12 8:00-11:00 am in Center 113
Please bring a picture ID

What you may use: No books, calculators, cell phones, or notes, *except* for 1 piece of paper, 8.5" x 11", written on TWO sides. It's OK to write on two separate pieces of paper and then tape or staple them to become 1 2-sided piece. You will not need any tables.

Time: The final will start promptly at 8:00 am. All papers must be turned in by 11:00.

What is expected: The final is cumulative. Many questions will be in the form of story problems, but some may ask you to calculate something, such as a cumulative distribution function. You should know how to do the problems given in the eight problem sets, as well as those discussed in class. You are not responsible for knowing all the problems done in the first eight chapters of the text, but only those discussed in class. No proofs will be asked, but it is important that you explain your notation and your methods.

What to bring: You will have to supply your own paper, bluebook preferred. Alternatively, you can bring loose sheets of paper and staple them together. Sharp-eyed monitors will check that nothing has been previously written in your bluebook!

The final will be a little longer than the two midterms combined, so you should have more time than on the midterms.

Important topics: Counting, formula for probability of a union of events, conditional probability, Baye's formula, independence of events, random variables (including expected value and variance). Discrete random variables we discussed: Bernouilli, binomial, indicator function of an event, Poisson, geometric, hypergeometric. Be sure to know (or know how to find) the expected value and variance of these events. Continuous random variables we discussed: uniform, normal, exponential. Use of deMoivre-Laplace and Central Limit Theorems. Definition of, and computations with, probability density functions, cumulative distribution functions, jointly distributed random variables, marginal density functions. Sum of random variables, calculating expected value by breaking up into sums and by conditioning.

Topics in text NOT covered (and which will not be on the final): Probability as a continuous set function, Gambler's Ruin Problem, Length of the Longest Run, Negative Binomial Random Variable, Zeta Distribution, Gamma Distribution, Weibull Distribution, Cauchy Distribution, Beta Distribution, Order Statistics, Joint Probability Distribution of Functions of Random Variables, Moments of Random Variables, Game of Craps, Moment Generating Functions, Additional Properties of Normal Random Variables, any topic in Chapter 8 other than the statements and uses of Markov's inequality and the Central Limit Theorem.

See you Friday!