MATH 302–Introduction to Probability

Section 101 - MWF 11–12 in Lasserre Room 102.

Instructor: E. Perkins
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Course webpage: http://www.math.ubc.ca/∼perkins/teaching.html
Office Hours: Monday 12:30-2, Thursday 2:15-3:45 or by appointment. (On occasion the Thursday office hour will be replaced by Friday 1:15-2:45–this will be announced on Wed.)

Text: A First Course in Probability, 8th Edition, by Sheldon Ross. Pearson, 2010.
NOTE: the 7th edition would do fine. I will not assign exercises directly from the text on the Homeworks but may suggest you look at particular exercises for practice.

Course Outline

The course will be based on topics from the first 8 chapters of Ross's text.
1. Sample spaces, events, axioms of probability (Ch. 2)
2. Some elementary combinatorics. Combinations and permutations (Ch. 1)
3. Conditional probabilities, independence and Bayes Formula (Ch. 3)
4. Discrete random variables (Ch. 4) and Continuous random variables (Ch. 5)
5. Joint distributions, marginal distributions and conditional distributions (Ch. 6)
6. Expectation: sums, covariance, moment generating functions (Ch. 7)
7. Limit Theorems: weak law of large numbers, central limit theorem (Ch. 8)

Grading Scheme
Weekly Assignments: 15
Two Tests: 35
Final exam: 50

Weekly homeworks will be assigned and collected on Wednesday. Homeworks handed in on the following Fri. will be given a *. Each student has two free *'s. After that, the grade will be divided by 2. No assignments will be accepted after Fri.

There are two sections of Math 302. Both sections cover the same material, have the same grading scheme, and will write the same examination. For obvious reasons the midterms will be distinct. Efforts will be made to make the assigned Homeworks similar.

Policy on missed assignments and tests.
Students who are unable to hand in a homework due to a medical or equivalent excuse will have that hw not count towards their final grade.

Missing a test normally results in a mark of zero. Exceptions are granted only with prior consent of the instructor or due to a medical emergency. In the latter case, the instructor must be notified within two working days of the missed test and presented with a doctor's note immediately upon the students return to UBC. If an exception is granted for a missed test, the final exam will be used to make up that portion of the grade.