STATISTICS 211 "CONCEPTS OF STATISTICS" FALL 2005 SYLLABUS

NOTE: All quizzes will be written during the tutorial. Final will be arranged by the registrar's office.

Schedule for quizzes and midterm

Quiz 1 September 27th
Quiz 2 October 11th
Quiz 3 October 25th
Midterm November 9th (written during regular scheduled class)
Quiz 4 November 22nd
Quiz 5 December 6th

No classes on Monday, October 10^{th} and November 10^{th} (Thursday) and November 11^{th} (Friday). Classes end on December 9^{th} (Friday).

Topics Covered

- (1) Completely randomized designs, observational studies, confounding factors (chp 1& 2)
- (2) Variable, histograms, shape, scale (Chp 3)
- (3) Measures of central tendency and dispersion normal curve, standard units, tables, problems, measurement error (**Chp 4,5,6**)
- (4) Probability trees, box models, conditional probability, multiplication and addition rules, independence (**chp 13, 14**)
- (5) Combinations, binomial probabilities, (chp 15)
- (6) Expected values, standard errors, laws of sums and averages, normal approximation to binomial (chp 16, 17, 18)
- (7) Confidence intervals for averages and percentages (chp 20,21,23)
- (8) Testing hypotheses, for the mean, t-test (chp 26)
- (9) Two-sample test for means, percentages (chp 27)
- (10) Chi-square test for goodness-of-fit, independence (chp 28)
- (11) Issues related to tests of hypotheses (chp 29)
- (12) Correlation and regression (**chp 8, 9, 10, 11,12**)