Statistics 351 (Fall 2007)
Syllabus (Tentative)
Wednesday, September 5 Introduction to Multivariable Probability
Friday, September 7 Random Variables, Moments, and Joint Distributions
Monday, September 10 Multivariate Random Variables (Chapter I)
Wednesday, September 12 Functions of Random Variables
Friday, September 14 The Transformation Theorem
Monday, September 17 Functions of Multivariate Random Variables
Wednesday, September 19 Conditioning (Chapter II)
Friday, September 21 Conditional Expectation
Monday, September 24 Distributions with Random Parameters
Wednesday, September 26 Mixed Gaussian Distributions
Friday, September 28 The Bayesian Approach
Monday, October 1 Regression and Prediction
Wednesday, October 3 Martingales
Friday, October $5 \quad$ Order Statistics (Chapter IV)
Monday, October 8 NO CLASS (UNIVERSITY HOLIDAY)
Wednesday, October 10
Friday, October 12
MIDTERM \#1
TBA
Monday, October 15 Order Statistics
Wednesday, October 17 Calculations with Order Statistics
Friday, October 19
Joint Distribution of the Order Statistic
Monday, October 22 Probability/Moment Generating Functions (Chapter III)
Wednesday, October 24
Friday, October 26
Characteristic Functions
Some Linear Algebra
Monday, October 29 The Multivariate Normal Distribution (Chapter V)
Wednesday, October 31
Friday, November 2
The Covariance Matrix
First Definition of Multivariate Normal
Monday, November 5 The Multivariate Normal Distribution
Wednesday, November 7 The Characteristic Function Definition of the MVN
Friday, November 9

Monday, November 12 NO CLASS (UNIVERSITY HOLIDAY)
Wednesday, November 14 Calculations with the MVN
Friday, November 16 MIDTERM \#2
Monday, November 19 Conditional Distributions for the Bivariate Normal
Wednesday, November 21 Independence of $\bar{X}$ and $S^{2}$
Friday, November 23 Independence of $\bar{X}$ and $S^{2}$
Monday, November 26 The Poisson Process (Chapter VII)
Wednesday, November 28 The Poisson Process
Friday, November 30 The Poisson Process
Monday, December 3 The Poisson Process
Wednesday, December 5 Final Exam Review
Friday, December $14 \quad$ FINAL EXAM (9:00 - 12:00)

