

Statistics 351 (Fall 2009)
Syllabus (Tentative)

Wednesday, September 9	Introduction to Multivariable Probability
Friday, September 11	Multivariate Random Variables (Chapter 1)
Monday, September 14	Functions of Random Variables
Wednesday, September 16	QUIZ #1
Friday, September 18	QUIZ #2
Monday, September 21	The Transformation Theorem
Wednesday, September 23	The Jacobian for Polar Coordinates
Friday, September 25	Functions of Multivariate Random Variables
Monday, September 28	Conditioning (Chapter 2)
Wednesday, September 30	Conditional Expectation and Conditional Variance
Friday, October 2	Distributions with Random Parameters
Monday, October 5	MIDTERM #1
Wednesday, October 7	Transforms (Chapter 3)
Friday, October 9	CLASS CANCELLED
Monday, October 12	NO CLASS (UNIVERSITY HOLIDAY)
Wednesday, October 14	The Bayesian Approach
Friday, October 16	Martingales
Monday, October 19	Martingales
Wednesday, October 21	Order Statistics (Chapter 4)
Friday, October 23	Order Statistics
Monday, October 26	Distribution of $X_{(k)}$, $k = 1, 2, \dots, n$
Wednesday, October 28	Calculations with Order Statistics
Friday, October 30	Joint Density of the Order Statistic
Monday, November 2	The Covariance Matrix (Chapter 5)
Wednesday, November 4	The Multivariate Normal Distribution
Friday, November 6	The Multivariate Normal Distribution
Monday, November 9	The Density Function Definition of MVN
Wednesday, November 11	NO CLASS (UNIVERSITY HOLIDAY)
Friday, November 13	A Geometric Description of the Bivariate Normal Density Function

Monday, November 16	Conditional Distributions for the Bivariate Normal
Wednesday, November 18	Calculations with the MVN
Friday, November 20	MIDTERM #2
Monday, November 23	Independence of \bar{X} and S^2
Wednesday, November 25	Independence of \bar{X} and S^2
Friday, November 27	The t -Test for Independent Normal Random Variables
Monday, November 30	Introduction to Stochastic Processes
Wednesday, December 2	Gambler's Ruin for Random Walk
Friday, December 4	The Poisson Process (Chapter 8)
Monday, December 7	The Poisson Process
Wednesday, December 9	Restarted Poisson Processes
Wednesday, December 16	FINAL EXAM (9:00 – 12:00)