

**APPLIED PROBABILITY AND STATISTICS I**  
**SM239 SYLLABUS**  
**SPRING 2004**

Text: J.L. Devore, *Probability and Statistics for Engineering and the Sciences*, 6<sup>th</sup> ed. Duxbury 2004.

Software: MATLAB<sup>®</sup>

Instructors: Profs. C. Mylander, J. Turner and G. Fowler.

Final exam: There will be a final exam administered during the scheduled exam period. This exam will be common to all sections.

Homework, tests and projects: Your instructor will make specific homework and project assignments. Tests during the semester will be scheduled by your instructor.

**SM239 Spring Semester**

Topics from probability and statistics associated with single populations.

Chapter 1 Descriptive Statistics: January 8 – January 16

Chapter 2 Probability Axioms and Basics: January 20 – January 30

Section 3.1-3.4 Discrete Distributions: February 2 – February 10

Tests of Hypotheses, and p-values: February 11 – February 13

Sign Test: February 17 – February 18

Section 3.5 Hypergeometric and Negative Binominal Distributions February 19 – February 23

Fisher's Exact Test: February 24 – February 25

Section 3.6 Poisson Distribution: February 26 – March 9

Spring Break: March 15 – March 19

Chapter 4 Continuous Distributions: March 22 – April 2

Sections 5.3, 5.4 Distributions of Statistics and the Mean: April 5 – April 9

Sections 7.1, 7.2, 7.3 Confidence Intervals of Mean and Proportion:  
April 12 – April 16

Chapter 8 and Section 15.1 Tests for Mean and Proportion: April 19 – April 26

Semester ends April 29

**SM339 Fall Semester**

Topics from probability and statistics associated with two or more populations.

Chapter 5 Correlation and Distributions of Linear Combinations

Chapter 9 Means and Proportions from Two Populations

Chapter 10 One-way Analysis of Variance

Chapter 12 Simple Linear Regression

Chapter 13 Multiple Regression

Sections 15.2, 15.3 Non-parametric ANOVA

Section 14.3 Contingency Tables