**291:532 Course Outline**

**Spring, 2012**

**Title:** Statistical Methods II

**Instructor:** Douglas A. Penfield  
Room 324 in the GSE  
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**Time:** Tuesday, 4:50-7:30 PM  
**Place:** MU-114

**Prerequisites:** 291:531

**Books:**  
*Introduction to the Practice of Statistics* (7th ed.)  
Moore, McCabe, and Craig  
W. H. Freeman and Co.  
*SPSS Student Version 17.0 for Windows*

**Exams:**  
Midterm - **March 6**  
Final - **May 1**

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**Schedule of Lectures**

**Jan. 17**  
Introduction to Hypothesis Testing (Sections 6.2 & 6.3);  
Power (Section 6.4)

**Jan. 24**  
One Sample t Test and Matched Pairs t Test (Section 7.1)  
{Skip: **The power of the t test, Inference for non-Normal populations, and The sign test**}

**Jan. 31**  
Two Sample z Test and Two Sample t Tests (Section 7.2)

**Feb. 07**  
One Sample Variance Test and Two Sample Test of Variances (Section 7.3)  
{Skip: **The power of the two-sample t test**}

**Feb. 14**  
One Sample Proportion Test (Section 8.1)  
Two Sample Test for Proportions (Section 8.2)

**Feb. 21**  
Analysis of Two-Way Tables (Section 9.1)  
Chi-Square Tests for Two-Way Tables (Section 9.2)  
{Skip: **Section 9.3 (Goodness of Fit)**}

**Feb. 28**  
Simple Linear Regression (Section 10.1)

**Mar. 06**  
Midterm

**Mar. 20**  
Simple Linear Regression (Section 10.2)
Mar. 27  Multiple Regression (Chapter 11)
Apr. 03  One-Way ANOVA (Section 12.1)
Apr. 10  One-Way ANOVA, Contrasts and Multiple Comparisons
         (Section 12.2) {Skip: Power}
Apr. 17  Two-Way ANOVA (Section 13.1)
Apr. 24  Two-Way ANOVA (Section 13.2) and Review
May 01   Final
Homework Assignments

Jan. 17  P. 378-381 (6.52, 6.56, 6.71, 6.73)
         P. 387-388 (6.91, 6.93)
         P. 397-398 (6.110, 6.111)

Jan. 24  P. 426-432 (7.15, 7.22, 7.27 Computer, 7.41 Computer)

Jan. 31  P. 453-459 (7.69, 7.76, 7.78, 7.80)

Feb. 07  P. 465-466 (7.98, 7.100, 7.102, 7.110)

Feb. 14  P. 486-490 (8.12, 8.16, 8.20, 8.21, 8.28, 8.31)
         P. 502-504 (8.52, 8.53, 8.55, 8.65, 8.67)


Feb. 28  P. 579-590 (10.6, 10.7, 10.8, 10.10 Computer)

Mar. 20  P. 579-690 (10.12, 10.13 Computer, 10.20, 10.21 Computer)

Mar. 27  P. 613-621 (11.9, 11.10, 11.11, 11.12, 11.13,
         11.30 Computer)

Apr. 03  P. 656-667 (12.13, 12.15, 12.19, 12.23, 12.30)

Apr. 10  P. 656-667 (12.38 Computer, 12.42 Computer,
         12.43 Computer, 12.44 Computer & By Hand)

Apr. 17  P. 699-709 (13.3, 13.4, 13.5, 13.7, 13.24,
         13.32 Computer)