

# **STA 4211 - Section 7324**

## **Design of Experiments - Spring Semester 2011**

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**Office Hours:** 1:00-2:00PM, TTh

### **Prerequisite:**

STA 4210 (Regression Analysis) or equivalent course.

### **Course Webpage**

[www.stat.ufl.edu/~rrandles/sta4211](http://www.stat.ufl.edu/~rrandles/sta4211)

### **Classes:**

MWF period 2 ( 8:30AM - 9:20AM): Room L005 Turlington Hall

### **Textbook:**

Kutner, Nachtsheim, Neter, and Li : *Applied Linear Statistical Models, Fifth Edition*, McGraw-Hill.

### **Course Objectives**

This course investigates the basic principles of experimental design, including analysis of variance, randomized block and Latin square designs, factorial and nested designs, analysis of covariance and response surface designs. The course uses functions developed in the R statistical programming language.

### **Academic Learning Compacts:**

This course is an Academic Learning Compact course. It must therefore test fundamentals of statistics and must include an oral and written component. The course will include a multiple choice exam covering fundamental concepts of applied statistics. A topic list will be issued for the exam. This exam counts five percent of the student's grade. The course will also include a individual project (described below) that will count as ten percent of the student's grade. It will involve a written report

and an oral presentation by each student. The grading scheme for the written and oral presentations will be posted.

### **Homework and Quizzes:**

Homework problems are posted on the Daily Assignments section of the class website. They will be collected periodically. No late homework will be accepted. Everyone is expected to do every problem. Quizzes are announced and given periodically. There are no makeup quizzes for any reason.

### **Individual Project:**

Students must conduct their own experiment and collect data. It does not have to be an academically-oriented experiment. The proposal (outline description) for this project is due Monday, March 21 and the final report is due at the time of the student's oral presentation.

	Exam 1 (Feb 16, tentative)	100 points
	Exam 2 (March 25, tentative)	100 points
	Final Exam (Tuesday, April 26, 5:30PM-7:30PM)	100 points
<b>Grading:</b>	Quizzes	20 points
	Homework	20 points
	ALC Exam	20 points
	Project	40 points
		<u>400 points</u>

**Grading Scale:** Grade boundaries will be no higher than,

A = 400 – 370    A– = 369 – 360    B+ = 359 – 350    B = 349 – 330    B– = 329 – 320  
C+ = 319 – 300    C = 299 – 280    C– = 279 – 270    D = 269 – 235    E = 234 – 0

### **ABOUT THE DEPARTMENT OF STATISTICS:**

The Department of Statistics at the University of Florida is one of the nation's leading statistics departments. The Department awards approximately 15 Bachelors degrees, 14 Masters degrees, and 9 Ph.D. degrees per year. The Statistics Department, chaired by Professor Michael Daniels, has a faculty of 20 members whose research interests include both theoretical and applied statistics. We welcome inquiries about our programs. The Statistics Department's main office is 102 Griffin-Floyd Hall (telephone 392-1941).