

SYLLABUS

Subject: Linear Models (STA6246)
Lecture: MW 4:30-5:45pm, Room 0212, BA
Instruction Period 01/07/2009 – 04/27/2009
Holidays 1/19/2008, Monday, Martin Luther King Jr.s Day
 3/9/2008 - 3/14/2008, Spring Break
Instructor: Dr. Xiaogang Su
 Room 102, CC II
 (407) 823-2940 [O]
 xsu@pegasus.cc.ucf.edu
Office Hours: Tuesday 2:00-3:00pm and Thursday 3:00-4:00 pm
Text Book: Rencher, A. C. (2000), *Linear Models in Statistics*,
 John Wiley & Sons, Inc., New York.
Course Web Page: <http://pegasus.cc.ucf.edu/~xsu/CLASS/STA6246>
Prerequisite: STA 6329, STA 4164, and STA 4322

- **Course Objective:** The goal of this course is to provide theoretical development of full rank linear statistical models, least squares and maximum likelihood estimation, interval estimation, hypothesis testing, model diagnostics, introduction to less than full rank models, and multiple comparison.
- **Grading:** There will be two midterms and one comprehensive final exam. Both practice problems and homework assignments will be made available on the course web page. You are strongly recommended to do exercises regularly and independently. In-class exams and take-home assignments add up together to the final grade.

Exam	Time and Date	Proportion
Midterm I	4:30-5:45pm, 02/19 Thursday	20%
Midterm II	4:30-5:45pm, 04/02 Thursday	20%
Final	4:00-6:50pm, 04/30 Thursday	30%
Homework	TBA	35%

The criterion for assigning grades is listed as follows. Incomplete grades and make-up exams are given only in extreme instances and only with prior permission of the instructor.

Range	94+	93-90	89-87	86-83	82-80	79-77	76-73	72-70	69-67	66-63	62-60	59-0
Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	D-	F

• **Reference Books:**

- Searle, S. R. (1971). *Linear Models*. John Wiley & Sons Inc. ISBN-13: 9780471769507.
- Scheffe, H. (1999). *The Analysis of Variance*. Wiley-Interscience. ISBN-13: 9780471345053.