

## ST512-R, Fall 2009

- Instructor:** Jason A. Osborne  
SAS Hall, Room 5238  
Phone: 515-1922
- Email:** [osborne@stat.ncsu.edu](mailto:osborne@stat.ncsu.edu) (for administrative matters only. For technical questions, please see me)
- Office Hours:** F 10:10 a.m. - 12:00 p.m. (subject to change)
- Course Website:** [www4.stat.ncsu.edu/~osborne/st512r/](http://www4.stat.ncsu.edu/~osborne/st512r/)
- Lecture:** M,W,F 9:10 a.m. - 10:00 a.m., SAS Hall 1216
- Labs :** SAS Hall 1107 (SICL lab), Thursday 3:00 pm - 4:15 pm
- TAs:** Tommy Dosset, [tjdosset@ncsu.edu](mailto:tjdosset@ncsu.edu)  
SeungJun Shin [sshin@ncsu.edu](mailto:sshin@ncsu.edu)
- Text:** *Statistical Research Methods in the Life Sciences* by P.V. Rao, 1998, 2007 Brooks/Cole.
- Lecture notes:** Online or at SirSpeedy (834-8128)
- Computing:** The statistical software package SAS will be used extensively. The labs are intended in part to facilitate the learning of this package. (SAS is available free of charge for NCSU students, see course website for info.)

**Course Description:** ST512-R is an applied course that introduces statistical methods based on linear models commonly used in designed experiments with continuous response variables. Examples include multiple linear regression, factorial designs, and split-plot experiments. It is a prerequisite for most advanced courses in statistics.

Topic	Chapter
Simple and multiple linear regression	10,11
General linear models, ANCOVA	12
Factorial experiments	13
Random and mixed effects models	14
Blocking: the RCBD and latin square	15
Repeated measures and split-plots	16

## Policies of the instructor

**Attendance:** While not mandatory, regular attendance and oral participation are encouraged. They will not be considered in the grading process.

### Graded Coursework:

- Homework: 7 assignments, the avg. of which counts 25% of total grade
- First midterm exam, (September 21), 25% of total grade
- Second midterm exam, (October 30), 25% of total grade
- Final Exam, (December 11, **8:00 a.m.** - 11:00 a.m) 25% of total grade
- Students achieving
  - ≥ 90% of the total points will receive at least an A-
  - ≥ 80% of the total points will receive at least a B-
  - ≥ 70% of the total points will receive at least a C- .

**Homework:** Working together on homework is acceptable, but assignments must be submitted individually. If SAS printouts are included in work, output and page counts must be kept to a minimum, and pertinent elements of the output must be explained clearly.

**Exams:** Exams are closed book. No make-up exams will be allowed. If a valid excuse for missing an exam is provided, the unmissed exams will be reweighted to account for a total of 75% of the grade.

**Academic Integrity:** Academic misconduct, such as cheating on exams, will not be tolerated. Please see the NCSU policy at the link below.

[http://www.ncsu.edu/policies/student\\_services/navigation.php](http://www.ncsu.edu/policies/student_services/navigation.php)  
(continued ...)/student\_discipline/