

STA 6127 Statistical Methods in Social Research II Spring 2015
Section 7314 MWF 7th period, 1:55-2:45pm, AND 134

Instructor Deborah Burr, 116C Griffin-Floyd Hall (FLO); Office Hours: MWF 8th period (3:00-3:50), or by appointment; Email: burrøstat. uf 1. edu (put “6127” in the subject line); Phone: 273-2973 (Do not leave a message.)

Teaching Assistant Pei-Li Wang, 116D FLO; peilicatøstat. uf 1. edu; 273-1849, Office Hrs TBD

Required Materials

Textbook Agresti and Finlay, *Statistical Methods for the Social Sciences* 4th Ed., Prentice Hall.

Course Notes At Target Copy, will be available Friday January 9. The course notes are an outline of what I will go over in class and are *not* a substitute for class attendance.

Calculator You need a scientific calculator, one which will compute at least the mean and standard deviation automatically.

Statistical Software I will use the free statistical computing language R; download it in the first week of the semester from <http://www.r-project.org>. You will need to do assignments for this course in R. Students who choose to do assignments in another package such as SPSS, should not expect any assistance from me or the TA.

Course Web Page <http://www.stat.uci.edu/~burr/Courses/6127>

Prerequisite STA 6126 or equivalent.

Course Description This course gives introductions to the analysis of variance, to multiple linear regression, and to analysis of count data in contingency tables. Some nonparametric methods are included. Some mathematics is required (at the level of high-school algebra); examples are used to explain all methods and concepts.

Main Course Objectives (short list)

- 1 Be able to carry out and interpret multiple regression analysis, including evaluation of models using diagnostic statistics.
- 2 Be familiar with the most common variable selection methods for multiple regression, and know their advantages and drawbacks.
- 3 Be able to fit several specific types of analysis of variance models, including one-way and two-way models (with and without interaction); know the meaning of interaction.
- 4 Carry out and interpret χ^2 analysis of contingency tables.

Grading Your final course grade will depend on your course score based on the following three components with their respective weights:

Homework/Quizzes:		20%
Projects (4)		40%
Midterm	Wednesday March 11 (in class)	20%
Final Exam	Wednesday April 22 8:20-10:20pm (Location TBD) OR Thursday April 30 (3:00-5:00pm)	20%

The assignment of letter grades will be determined as follows:

Grade	Score
A	91-100
A-	88-90
B+	85-87
B	75-84
B-	68-74
C+	60-67
C	50-59
D	40-49
E	<40

Homework There will be weekly assignments of reading and exercises from the textbook, some of which will be handed in for grading. There will be three or four data analysis assignments, requiring the student to carry out the appropriate statistical procedures in R and to write a report showing the data analysis results and interpreting them.

Tests There will be in-class midterm and final exams. A typical test problem will contain computer (R) output, which the student will be asked to interpret.

Course Policies

Homework Homework must be turned in at the beginning of the lecture on the due date. Late homework will not be accepted.

Tests The tests are closed-book, closed-notes. You may bring one 8.5 x 11 sheet of notes to each test. Bring a picture ID, your calculator, pencils and erasers. Makeup exams must be approved before the time of the exam and will be given only in case of medical or family emergencies (which must be appropriately documented). All work must be entirely your own.

Disabilities If you need to request accommodation due to a disability, please register with the Dean of Students office. The Dean of Students will provide documentation, which you then bring to me.