

Schedule of Classes

The course objective is to train students in statistical and econometric methods used in health services research, with a focus on practical application of advanced regression models. The course will be graded on the usual letter scale (A-F or pass/no pass). Classes will be held on Tuesdays and Thursdays from 10-11:50. Grades will be based on class participation (5%), homework assignments (35%) and a final research paper (60%). The research paper will be due at the time scheduled for the class final.

Students must purchase a course reader and the following textbook: J. Scott Long. *Regression Models for Categorical and Limited Dependent Variables*. Advanced Quantitative Techniques in the Social Sciences Series, Volume 7. Sage Publications, Inc. Thousand Oaks, CA: 1997. Additional readings and textbooks for the class are either on reserve at the library or available for free on the web to members of the UCLA community.

<u>Topic</u>	<u>Lecture(s)</u>	<u>Date(s)</u>
Introduction to class and Taylor series expansions	1	Tuesday, April 5
Bootstrapping	2	Thursday, April 7
Simulation methods	3	Tuesday, April 12
Utility theory framework for qualitative choice models	4	Thursday, April 14
Review of logit and probit models	5	Tuesday, April 19
Multinomial and conditional logit models	6	Thursday, April 21
Nested logit models Homework #1 due (covers lectures 1-5)	7	Tuesday, April 26
Ordered logit models	8	Thursday, April 28
Multi-level models	9	Tuesday, May 3
Multi-level models (cont'd)	10	Thursday, May 5
Generalized Estimating Equations Homework #2 due (covers lectures 6-8) Paper proposals due	11	Tuesday, May 10
Count data models (Poisson, negative binomial)	12	Thursday, May 12
Zero-inflated count data models Homework #3 due (covers lectures 9-11)	13	Tuesday, May 17
Two-part models	14	Thursday, May 19
Tobit models Descriptive statistics due	15	Tuesday, May 24
Sample selection models	16	Thursday, May 26
Treatment effects and bivariate probit models	17	Tuesday, May 31

Homework #4 due (covers lectures 12-15)

Two-stage least squares 18 Thursday, June 2

Two-stage least squares (cont'd) 19 Tuesday, June 7

Instrumental variables with nonlinear variables 20 Thursday, June 9

Homework #5 due (covers lectures 16-19)

Final paper due Thursday, June 16th, by 5 p.m.