

Introduction to Health Services Research Methods (HS237C)
Spring 2007 Syllabus

Instructor: Susan L. Ettner, Ph.D.

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). Grades will be based on class participation (5%), homework assignments (35%) and a final research paper (60%). The homework questions contained in each assignment are listed at the bottom of the syllabus.

The research paper will be due at 4 pm on Friday, June 15th (end of finals week). Two hard copies of the paper and clean log files must be delivered to Dr. Ettner's office (911 Broxton Plaza, Room 106). Separate documents provide detailed instructions regarding the grading of the final paper and a template for the paper.

A reading list for each session with electronic links to the readings is provided in a separate document available on the class website. Any articles not accessible on-line through the UCLA library will be placed on reserve. Students should already have the following textbooks from HS237B:

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.

Wooldridge J. *Introductory Econometrics: A Modern Approach. Third Edition*. South-Western College Publishing, 2006.

<u>Topic</u>	<u>Lecture(s)</u>	<u>Date(s)</u>
Course overview; transformations and retransformations	1	Monday, April 2
Transformations and retransformations (cont'd)	2	Wednesday, April 4
Generalized linear models	3	Monday, April 9
Count data models	4	Wednesday, April 11
Zero-inflated count data models Homework #1 due (covers lectures 1-3)	5	Monday, April 16
Two-part models	6	Wednesday, April 18
Tobit models	7	Monday, April 23
Sample selection models	8	Wednesday, April 25
Treatment effects and bivariate probit Homework #2 due (covers lectures 4-7)	9	Monday, April 30
Two-stage least squares	10	Wednesday, May 2
Two-stage least squares (cont'd) Homework #3 due (covers lectures 8-9)	11	Monday, May 7
Instrumental variables with nonlinear variables Paper proposals due	12	Wednesday, May 9
Discussion of paper proposals	13	Monday, May 14

Discussion of paper proposals (cont'd) <i>Descriptive statistics due</i>	14	Wednesday, May 16
Discussion of paper proposals (cont'd) <i>Homework #4 due (covers lectures 10-12)</i>	15	Monday, May 21
Survival analysis	16	Wednesday, May 23
Class cancelled for Memorial Day holiday	17	Monday, May 28
Survival analysis (cont'd)	18	Wednesday, May 30
Survival analysis (cont'd)	19	Monday, June 4
Propensity scores <i>Homework #5 due (covers lectures 16-19)</i>	20	Wednesday, June 6
<i>Two hard copies of final paper and <u>clean</u> log files due</i>		Friday, June 15 th (4 p.m.)

<u>Homework Question</u>	<u>Homework</u>	<u>Due Date</u>
Transformations and retransformations	1	Monday, April 16
Generalized linear models (gamma)	1	Monday, April 16
Count data models	2	Monday, April 30
Two-part vs. Tobit models	2	Monday, April 30
Sample selection models	3	Monday, May 7
Treatment effects models	3	Monday, May 7
Bivariate probit models	3	Monday, May 7
Two-stage least squares	4	Monday, May 21
IV probit models	4	Monday, May 21
Survival analysis	5	Wednesday, June 6