

HS237B Reading Assignments

- 08-Jan-07 Overview of course**
Optional: Kennedy, Chapters 1-3 (technical sections not required)
Handouts
- 10-Jan-07 Missing data, single imputation, multiple imputation**
Required: Barnard, J. & Meng, X.L. (1999)
Coen et al. (2002)
- 12-Jan-07 Lab**
Required: Handouts & An Intro. To Modern Econometrics Using Stata (“Stata book”)
- 17-Jan-07 Sampling theory, survey weights, clustered samples part I**
Required: Survey methodology article TBA
CHIS 2003 readings
http://www.chis.ucla.edu/pdf/CHIS2003_method1.pdf
http://www.chis.ucla.edu/pdf/weighting_summary_chis03_020705.pdf
Optional: Sage *"Introduction to survey sampling"* (Kalton, G., 1983)"
a very good reference for non-statisticians.
For a serious sampling text: Lohr's "Sampling: Design and Analysis (1999)" would be ideal.
- 19-Jan-07 Lab**
Required: Handouts & Stata book
- 22-Jan-07 Sampling theory, survey weights, clustered samples part II**
Required: Winship and Radbill (1994)
- 24-Jan-07 Generalized Estimating Equations**
Required: Norton et al. (1996)
Localio et al. (2001)
Needleman et al. (2002)
Optional: Liang and Zeger (1993)
Greenfield et al. (2002)
- 26-Jan-07 First-difference and fixed effects**
Required: Wooldridge (2006), Sections 13, 14.1-14.3
Optional: Ozminkowski et al. (2002)
Hofferth et al. (2001)
Kennedy, Chapter 14.6
- 29-Jan-07 Random Effects**
Required: Wooldridge (2006), Sections 14.2-14.3

31-Jan-07 Multi-level models

- Required:** Sullivan et al. (1999)
Subramanian SV, Jones K, Duncan C, (2003)
Diez Roux (2002)
- Optional:** Subramanian et al. (2005)
Rice and Jones (1997)
Carey (2000)

Resources: <http://www.hsph.harvard.edu/thegeocodingproject/>
<http://www.hsph.harvard.edu/thegeocodingproject/webpage/monograph/multilevel.htm>

02-Feb-07 Lab

- Required:** Handouts & Stata book

05-Feb-07 Review of material; Utility theory framework for qualitative choice models, logit and probit

- Required:** McFadden, (2001)
Reference: Train K. (1985)

07-Feb-07 Logit and probit; Interactions in logit and probit;

- Required:** Long (1997), Chapter 2-3
Zhang and Yu (1998)
MLE Handout
- Optional:** Hosmer and Lemeshow (2000), Chapter 3
Freese and Long (2005), Chapter 4
Kennedy, Chapter 15
- Resources:** Ai and Norton (2003)
Greenland (2004)

09-Feb-07 Lab

- Required:** Handouts & Stata book

12-Feb-07 Taylor series expansions and bootstrapping

- Required:** Carpenter and Bithell (2000)
- Optional:** Wooldridge (2006), Chapter 1 and Appendices A-E
Barber and Thompson (2000)
Kennedy, Chapter 4.6

14-Feb-07 Simulation methods; Review of material

- Required:** King, Tomz, and Wittenberg (2000)

16-Feb-07 Lab

- Required:** Handouts & Stata book

19-Feb-07 No Class: President's Day

21-Feb-07 Review of Material; Instruction for writing paper proposals

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23-Feb-07 Lab

Required: Handouts & Stata book

26-Feb-07 Multinomial logit and probit models

Required: Long (1997), Chapter 6

Optional: Studdert et al. (2002)
Bumpass et al. (2000)
Duncombe et al. (2001)
Freese and Long (2005), Chapter 6

28-Feb-07 Ordered Logit Models

Required: Long (1997), Chapter 5

Optional: Zuvekas and Hill (2000)
Freese and Long (2005), Chapter 5

02-Mar-07 Lab: Paper proposals due

05-Mar-07 No Class

07-Mar-07 Discussion of paper proposals

09-Mar-07 Continuation of discussion of paper proposals

**12-Mar-07 Review of material; Instruction for writing papers
Descriptive statistics for paper due**

14-Mar-07 Wrap up course

23-Mar-07 Papers due

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READING LIST

Required Textbooks

Long J.S. *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*. South-Western College Publishing, 2003.

An Introduction to Modern Econometrics Using Stata, Christopher F. Baum Stata Press, 2006

Required articles and chapters (handouts):

Subramanian SV, Jones K, Duncan C, 2003, Multilevel methods for public health research, in Kawachi I, Berkman L. Eds. *Neighborhoods and Health*, New York: Oxford University Press, 65-111.

Required and optional articles (available on the web):

We have provided web links that had open access or via UCLA licenses. If you can't access the links directly, please go through UCLA search engines.

Ai C, Norton EC. "Interaction Terms in Logit and Probit Models". *Economics Letters* 2003;80(1):123-129. Available at <http://www2.library.ucla.edu/search/ejournals.cfm>

Barber JA, Thompson SG. "Analysis of Cost Data in Randomized Trials: An Application of the Non-Parametric Bootstrap." *Statistics in Medicine* 2000; 19(23):3219-3236. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/75505245/PDFSTART>.

Barnard, J. & Meng, X.L. (1999). Applications of multiple imputation in medical studies: from AIDS to NHANES. *Statistical Methods in Medical Research*, **8**, 17-36. Available at <http://smm.sagepub.com/cgi/reprint/8/1/17>

Bumpass LL, Thomson E, Godecker AL. "Women, Men and Contraceptive Sterilization." *Fertility and Sterility* 2000; 73(5):937-946. Available at <http://www2.library.ucla.edu/search/ejournals.cfm>

Carey K. "A Multi-Level Modeling Approach to Analysis of Patient Costs Under Managed Care." *Health Economics* 2000; 9(5):435-446. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/72511805/PDFSTART>.

Carpenter J, Bithell J. "Bootstrap Confidence Intervals: When, Which, What? A Practical Guide for Medical Statisticians." *Statistics in Medicine* 2000;19(9):1141-1164. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/72001167/PDFSTART>.

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Coen A. Bernaards, Melissa M. Farmer, Karen Qi, Gareth S. Dulai, Patricia A. Ganz, and Katherine L. Kahn, "Comparison of Two Multiple Imputation Procedures in a Cancer Screening Survey" (January 1, 2002). *Department of Statistics, UCLA. Department of Statistics Papers*. Paper 2002010102. <http://repositories.cdlib.org/uclastat/papers/2002010102>

Diez Roux AV. "A Glossary for Multilevel Analysis." *Journal of Epidemiology and Community Health* 2002; 56:588-594. Available at <http://jech.bmjournals.com/cgi/reprint/56/8/588>.

Duncombe W, Robbins M, Wolf DA. "Retire to Where? A Discrete Choice Model of Residential Location." *International Journal of Population Geography* 2001; 7:281-293. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/85512193/PDFSTART>

Greenfield S, Kaplan SH, Kahn R, Ninomiya J, Griffith JL. "Profiling Care Provided by Different Groups of Physicians: Effects of Patient Case-Mix (Bias) and Physician-Level Clustering on Quality Assessment Results. *Annals of Internal Medicine* 2002; 136: 111-121. Available at <http://www.annals.org/cgi/reprint/136/2/111.pdf>.

Greenland S. *Am J Epidemiol*. 2004 Model-based estimation of relative risks and other epidemiologic measures in studies of common outcomes and in case-control studies. Aug 15;160(4):301-5. <http://aje.oxfordjournals.org/cgi/reprint/160/4/301>

Hofferth SL, Reid L, Mott FL. "The Effects of Early Childbearing on Schooling Over Time." *Family Planning Perspectives* 2001; 33(6): 259-267. Available at <http://www.jstor.org/view/00147354/di021379/02p00066/0>

King G, Tomz M, Wittenberg J. "Making the Most of Statistical Analyses: Improving Interpretation and Presentation." *American Journal of Political Science* 2000; 44(2):341-355. Available at <http://www.jstor.org/view/00925853/di015661/01p0029w/0?frame=noframe&userID=958ef314@ucla.edu/01cc99334100501bfa782&dpi=3&config=jstor>

Liang KY, Zeger SL. "Regression Analysis for Correlated Data." *Annual Review of Public Health* 1993; 14:43-68. available at: <http://arjournals.annualreviews.org/doi/abs/10.1146/annurev.pu.14.050193.000355>

Localio AR, Berlin JA, Ten Have TR, Kimmel SE. "Adjustments for Center in Multicenter Studies: An Overview." *Annals of Internal Medicine* 2001; 135:112-123. Available at <http://www.annals.org/cgi/reprint/135/2/112.pdf>

McFadden, "Economic Choices" *American Economic Review* (2001) 91: 3 pp. 351-358. Available at: <http://www.jstor.org/view/00028282/di020245/02p0142u/0>

Needleman, J., P. Buerhaus, et al. (2002). "Nurse-staffing levels and the quality of care in hospitals." *N Engl J Med* 346(22): 1715-22. <http://content.nejm.org/cgi/reprint/346/22/1715.pdf>

Norton EC, Bieler GS, Ennett ST, Zarkin GA. "Analysis of Prevention Program Effectiveness with Clustered Data Using Generalized Estimating Equations." *Journal of Consulting and Clinical Psychology* 1996; 64(5):919-926. Available at PUBMED via UC Links <http://ft1.csa.com/ids70/resolver.php?sessid=4351ad6da3cb28db638ea20337f7d8da&server=www->

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uk1.csa.com&check=aa1ff6eab6401e12141dd7e93a52be44&db=psycarticles-set-c&key=CCP%2F64%2Fccp_64_5_919&mode=pdf

Ozminkowski RJ, Ling D, Goetzel RZ, Bruno JA, Rutter KR, Isaac F, Wang S. "Long-Term Impact of Johnson & Johnson's Health and Wellness Program on Health Care Utilization and Expenditures." *Journal of Occupational and Environmental Medicine* 2002; 44:21-29. Available at <http://www2.library.ucla.edu/search/ejournals.cfm>

Rice N, Jones A. "Multilevel Models and Health Economics." *Health Economics* 1997; 6(6):561-575. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/14687/PDFSTART>.

Studdert DM, Bhattacharya J, Schoenbaum M, Warren B, Escarce JJ. "Personal Choices of Health Plans by Managed Care Experts." *Medical Care* 2002; 40(5): 375-386. Available at <http://www2.library.ucla.edu/search/ejournals.cfm>

Subramanian SV, Chen JT, Rehkopf DH, Waterman PD, and Krieger N. Racial Disparities in Context: A Multilevel Analysis of Neighborhood Variations in Poverty and Excess Mortality Among Black Populations in Massachusetts. *Am J Public Health* 2005; 95: 260-265. <http://www.ajph.org/cgi/reprint/95/2/260>

Sullivan LM, Dukes KA, Losina E. "An Introduction to Hierarchical Linear Modeling." *Statistics in Medicine* 1999; 18(7): 855-888. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/55003393/PDFSTART>.

Winship C, Radbill Larry, "Sampling Weights and Regression Analysis." *Sociological Methods & Research*, 11 1994; vol. 23: pp. 230 - 257. Available at <http://smr.sagepub.com/cgi/reprint/23/2/230>

Zhang J, Yu KF. "What's the Relative Risk? A Method of Correcting the Odds Ratio in Cohort Studies of Common Outcomes." *Journal of the American Medical Association* 1998; 280(19): 1690-1691. Available at <http://jama.ama-assn.org/cgi/reprint/280/19/1690>

Zuvekas SH, Hill SC. "Income and Employment Among Homeless People: The Role of Mental Health, Health and Substance Abuse." *The Journal of Mental Health Policy and Economics* 2000; 3:153-163. Available at <http://www3.interscience.wiley.com/cgi-bin/fulltext/80002960/PDFSTART>

Optional articles, chapters and books (on reserve at library):

Freese J., Long J.S., *Regression Models for Categorical Dependent Variables Using Stata, 2nd Edition*, College Station, TX: Stata Press, 2005.

Kennedy P. *A Guide to Econometrics, 5th Edition*. Cambridge, MA: 2003. (Chapters 1-3)

Hosmer, D. and S. Lemeshow. Chapter 3 in *Applied Logistic Regression, Second Edition*. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons. New York, NY: 2000.

Train K. Chapters 1, 2, 4 in *Qualitative Choice Analysis: Theory, Econometrics, and an Application to Automobile Demand*. MIT Press, 1985