

PA607 Quantitative Methods I
Tuesdays, 2:15 – 4:45
Instructor: Lynn C. Burbridge
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Readings From:

Paul D. Allison, **Logistic Regression Using the SAS System**, Cary, NC: SAS Institute, 2001.

Earl Babbie, **Survey Research Methods**, Belmont: Wadsworth Publishing Company.

Lynn Burbridge, "Cross-Sectional, Longitudinal, and Time-Series Data: Uses and Limitations," in G.J. Miller and M.L. Whicker, eds., **Handbook of Research Methods in Public Administration**, New York: Marcel Dekker, Inc., 1999.

Frank C. Dilorio and Kenneth A. Hardy, **Quick Start to Data Analysis with SAS**, Belmont, MA: Duxbury Press, 1996.

G.J. Duncan and D.H. Hill, "Assessing the Quality of Household Panel Data: The Case of the Panel Study of Income Dynamics," **Journal of Business and Economic Statistics**, 7, 441 (1989).

Rudolf J. Freund and Ramon C. Littell, **SAS System for Regression**, Cary, NC: SAS Institute.

Stephen Jay Gould, "The Model Batter: Extinction of .400 Hitting and the Improvement of Baseball," **Full House: The Spread of Excellence from Plato to Darwin**, New York: Three Rivers Press, 1996.

Joseph F. Hair, Jr., Rolph E. Anderson, Ronald L. Tatham, and William C. Black, **Multivariate Data Analysis**, Upper Saddle River, NJ: Prentice Hall.

Larry Hatcher and Edward Stepanski, **A Step-by-Step Approach to Using the SAS System for Univariate and Multivariate Statistics**, Cary, NC: SAS Institute, 1994.

G.J. Duncan and D.H. Hill, "Assessing the Quality of Household Panel Data: The Case of the Panel Study of Income Dynamics," **Journal of Business and Economic Statistics**, 7, 441 (1989).

Harry H. Kelejian and Wallace C. Oates, **Introduction to Econometrics: Principles and Applications**, New York: Harper & Row Publishers, 1974.

David G. Kleinbaum, Lawrence L. Kupper, Keith E. Muller, Azhar Nizam, **Applied Regression Analysis and Other Multivariate Methods**, Pacific Grove: Duxbury Press.

Sandra D. Schlotzhauer and Ramon C. Littell, **SAS System for Elementary and Statistical Analysis**, Cary, NC: SAS Institute.

Schedule of Classes

- September 3** *Overview of Course*
- September 10** Quantitative Data Analysis: Uses and Mis-Uses
 Babbie, Chapters 1-3
 Gould, "The Model Batter"
- September 17** Making Choices: Research Design/Survey Design
 Babbie, Chapter 4
 Burbridge, "Cross-Sectional"
 Duncan and Hill, "Assessing"
- September 24** Sampling/Questionnaire Design
 Babbie, Chapters 5-7
 Handout
 Homework 1
- October 1** Examining and Plotting Your Data
 Hair, et al., Chapter 2
 Schlotzhauer and Littell, Chapter 4-5
 Homework 2
- October 8** Inference and Measures of Association
 Schlotzhauer and Littell, Chapters 7-8
 Hatcher and Stepanski, Chapter 15
 Homework 3
- October 15** Cross-Tabulations & Chi Square
 Chapters 8 & 14
 Schlotzhauer and Littell, Chapter 11
 Homework 4
- October 22** Basic Correlation and Regression Analysis
 Hair, et al., Chapter 4
 Freund and Littell, Chapter 2
 Homework 5
- October 29** Regression Diagnostics
 Hair, et al., Appendix 4A
 Freund and Littell, Chapters 3 and 4
 Homework 5

- November 5** Re-working Your Analysis: Transforming Variables
Handout
Homework 6
- November 12** Interaction and Confounding
Babbie, Chapter 15
Kleinbaum, Chapter 11
- November 19** *Simultaneous Equations: Two-Stage Least Squares*
Kelejian and Oates, Chapter 7
Homework 7
- November 23** Logistic Regression
Hair, et al., 276-325
Allison, Chapter 2 and 3
Homework 9
- November 26** **THANKSGIVING WEEK—NO CLASS**
- December 3** Weighted Least Squares
Handout
- December 10** Wrap Up