Sociology 690 - Spring 2008 Graduate Course in Quantitative Research Methods

(www.vcsun.org/~jschutte/s690s08/homepage.htm)

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This class will meet each Wednesday evening from 7:00 to 9:45 pm in Sierra Hall 180, beginning on January 23rd and continuing until May 14th. It consists of part lecture, part discussion and part laboratory participation. You are required to have taken Sociology 364 and Sociology 497 to enroll in this class. Those who have taken 690 prior to this semester, but who want to audit this section, are welcome. The purpose of the class is create a more sophisticated understanding of the reasoning behind empirical science, the techniques for its design and the analysis of its findings, particularly with respect to the use of multivariate techniques in SPSS. But in a larger sense it is a practicum that will teach you to create, conduct, calculate and comment in the world of social research. Accordingly it will consist of both discussion and application of concepts contained in the following four subject areas (elaborated on the ensuing pages): 1) foundations of social research; 2) methods of social research; 3) quantitative analysis of social research; and 4) publishing social research. You will be evaluated via one written midterm and one final, with the additional requirements to 1) report on further readings; and 2) to submit a research paper. My office hours will be held Wednesday evening from 6:00 to 7:00 pm and Saturdays at 3:30 pm. Each student will be held responsible for all required readings. Presentations will be based on optional readings. The paper will be based on the analysis of SPSS output. Plus-Minus grading will be utilized. All tests and presentations will be typed and submitted electronically.

Sociology 690 – Quantitative Methods

Section I – The Foundations of Social Research	Week
A. The Cultural Foundations of Research1. Paradigms and Perspectives2. Money and Motivations	1
B. The Logistical Foundations of Research1. Methods and Measurement2. Information and Enquiry	2
Section II – Methods of Design and Data Collection in Social Research	
A. Design Methods1. Sampling Designs2. Experimental Designs	3 4
 B. Collection Methods 1. Reactive Methods 1 – Surveys 2. Reactive Methods 2 – Observation 3. Non Reactive Methods – Secondary Analysis 	5 6 7
Midterm Examination	8
Section III – Methods of Analysis in Social Research	
 A. Simple Univariate and Bivariate Models 1. Non-quantitative Descriptions: Frequencies and Cross-tabulation 2. Quantitative Description: Means, Variances & Co-variances 	9 10
 B. Complex Multivariate Models 1. Quantitative Dependent Variables: a. Analysis of Variance and Covariance b. Regression and Path Analysis 2. Categorical Dependent Variables: a. Log Linear models 	11 12 13
b. Logistic Regression Section IV – Methods for Publishing Social Research	14
A. Styles and Presentations	15
B. Journals and Submission	
Final Examination	16

Reading List for Sociology 690

Assigned Reading:

- 1. Bernard, H. Russel. (1999) Social Research Methods. Sage Publications, Inc. 781 Pages
- 2. Merler, Craig A. and Rachel A. Vannatta. (2005) *Advanced and Multivariate Statistical Methods*. Glendale, CA. Pyrczak Publishing. 348 Pages.

Additional Readings:

Section I – Foundations

The Culture of Research

- 1. Thomas J. Hickey. (2005). *History of Twentieth-Century Philosophy of Science*. www.philsci.com, (Chap 1, 5& 6). Retrieved 1-30-07.
- 2. Kuhn, Thomas. (1996). *The Structure of Scientific Revolutions*. University of Chicago Press. See also outline at www.des.emory.edu/mfp/Kuhn.html.
- 3. Buescher, Eric. (2003). Scientific Research Funding. www.spusa.org/issue/sciresearchfunding/sci-rsch brief.html. Retrieved 1-28-06

The Logistics of Research

- 1. Miller, Delbert. (2002). *Handbook of Research Design and Social Measurement*. Sage Publications, Inc.
- 2. Blumer, Herbert. (1956) "Sociological Analysis and the Variable". <u>ASR V21</u>. See online at http://spartan.ac.brocku.ca/~lward/Blumer/Blumer 1956.html.

Section II – Methods of Research

Methods of Design - Sampling

- 1. Kish, Leslie. (1965) Survey Sampling. New York. John Wiley and Sons.
- 2. Galloway, Allison. "Survey Sampling: A Workbook" Retrieved 1-29-06 www.tardis.ed.ac.uk/~kate/qmcweb/sacont.htm.

Methods of Design - Experiments

- 3. Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research. Boston: Houghton Mifflin.
- 4. Zelditch, Morris. (1969) "Can You Really Study an Army in the Laboratory?" in A. Etzioni (ed.), Complex Organizations, Holt, Rinehart, Winston, 2nd Ed., Pgs 528-539.

Methods of Collection - Surveys

- 1. Babbie, Earl. 1992. *The Practice of Survey Research*. Belmont, California: Wadsworth.
- 2. Totten, Jeff W. "Use of E-Mail and Internet Surveys by Research Companies". Journal of Online Research, 2002. Retrieved 1-28-06. http://www.ijor.org/ijor_archives/articles/use_of_email_and_internet_surveys.pdf.

Methods of Collection – Observation

- 1. Zimbardo, Phillip (1971) Stanford Prison Experiment. http://www.prisonexp.org/ Retrived 1-29-06
- 1. Lofland, John (2004). Analyzing Social Settings. Wadsworths.

Methods of Collection – Secondary Analysis

- 1. K Jill Kiecolt, Laura E Nathan (1985) Secondary Analysis of Survey Data. Newbury Park: Sage Publications, Inc.
- 2. ICPSR "Data Use Tutorial" http://www.icpsr.umich.edu/ Retrieved 129-06

Methods of Analysis

- 1. Duncan, Otis Dudley (1975). *Introduction to structural equation models*. New York: Academic Press.
- 2. Further Reading list to be distributed after first week.

Methods for Publishing

- 1. ASA Style Guide Several Locations. Here is one of them http://www.calstatela.edu/library/bi/rsalina/asa.styleguide.html.
- 2. "Cumulative Index of Sociology Journals" Washington DC: American Sociological Association Publication.

Grading Criteria

Part I - Examinations (50%)

There will be two examinations in this class, each worth 25% of your grade. The midterm will consist of material discussed in the first half of the semester. The Final will be based on the material discussed after the midterm. These two sections can be roughly identified as methods of conducting research and methods of analyzing data.

Part II - Participation (25%)

There will be additional suggested readings in this class that will be assigned so that each class member will be responsible for at least one additional source during the semester. You will be required to read, provide written comment and share with other class members, the substance of that reading. A signup sheet and proforma report outline will be distributed during the first week.

Part III - Project (25%)

There will be a project submitted at the end of the semester, based upon the analysis of original data or culled from an existing data source (e.g. ICPSR) and utilizing one or more of the techniques discussed and applied through the Statistical Package for the Social Sciences (SPSS). The purpose of this exercise is to both assure your understanding the workings of key SPSS modules and to also provide a forum for the discussion of publishing findings.