

University of Calgary
Department of Sociology
Sociology 613 – Seminar in Quantitative Research Methods
Winter, 2013

Instructor:	Dr. Jenny Godley	Class Hours: W 9:30-12:30
Office:	SS922	Location: SS921
Office Hours:	T, Th 11:00-12:00	
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* Please use email for administrative concerns only. Substantive issues should be addressed in person, either in class, during office hours, or during an appointment time.

NOTE: this course outline is subject to revision. All changes will be announced in class.
Last revised 4 January 2013

Overview:

This course is a graduate-level seminar in quantitative research methods. We will examine issues related to the logic of social research, research design, research ethics, data collection, and measurement. Emphasis will be placed on quasi-experiments, survey methods, and secondary data analysis. Course requirements include class participation, weekly lab assignments, and the completion of a research proposal. The weekly lab assignments will involve reading and critiquing recent articles published in international sociology journals. The proposal will be due in stages throughout the semester.

Requirements:

- A. **Reading:**
Readings are assigned for each day of class. Please come to class every day having read the materials. Bring any questions or comments you have about the readings with you to share with your classmates. Please bring your copies of the texts to class, as we will refer to them often. Readings marked (*Suppl.*) are supplemental and are not required. We will be using one textbook throughout the semester. The textbook is available for

purchase at the U of C Bookstore. All of the articles are available for downloading through the class Blackboard site. Additional readings may be assigned throughout the semester; they will be announced in class and / or on email.

Textbook: Singleton and Straits. *Approaches to Social Research (5th Edition)*. 2010. Oxford University Press. (Abbreviated as S&S in the course schedule).

B. In-Class Participation:

You are encouraged to participate as fully as possible in classroom activities. This class is a seminar, which requires participation of all members. Please take classroom participation seriously; respect your peers' contributions, and provide feedback as constructively as possible. Class participation is worth 10% of your final grade.

C. Lab Assignments:

There will be ten lab assignments. You are encouraged to work together on the lab assignments, but the material that you hand in must be your own work. The assignments are each worth 4% of your final grade, for a total of 40%. The lab assignments will be handed out in lab on Wednesdays and will be due by noon the following Monday. You may email me your lab assignments.

D. Research Proposal:

Each student will be required to develop a research proposal. The research proposal, due in stages throughout the semester, will be worth 50% of your final grade. A full description of what is expected for each section of the research proposal will be provided in class. The sections of the research proposal are due according to the following schedule:

Research Interests One-Pager: Jan. 28	5%
Literature Review and Theory: March 4	10%
Data, Research Questions, Variables, Hypotheses: March 18	10%
Proposed Methods: April 1	10%
Full Proposal: April 19	15%

Grades:

Your final grade will be computed as follow:

- Lab Assignments	40%
- Class Participation	10%
- Research Proposal	50%

I will use the following scale to convert percentage grades to letter grades for this class.

A+ = 95-100	A = 90-94	A- = 85-89
B+ = 80-84	B = 75-79	B- = 70-74
C+ = 65-69	C = 60-64	C- = 55-59
D+ = 50-54	D = 45-49	
F = below 45		

The following description of letter grades comes from the University of Calgary Calendar.

An A indicates superior performance, showing comprehensive understanding of the subject matter.

A B indicates clearly above average performance, with knowledge of the subject matter generally complete.

A C indicates satisfactory performance, with a basic understanding of the subject matter.

A D indicates marginal performance and generally insufficient preparation for subsequent courses in the same subject.

An F indicates unsatisfactory performance, or failure to meet course requirements.

Additional Information:

A. **FOIP:**

The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside instructor's office, the department office, etc. Term assignments must be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

B. **Academic Accommodation:**

Students with a disability, who require academic accommodation, need to register with the Disability Resource Centre (MC 295, telephone 220-8237). Academic accommodation letters need to be provided to course instructors no later than fourteen (14) days after the first day of class. It is the student's responsibility to register with the Disability Resource Centre and to request academic accommodation, if required.

C. **Plagiarism:**

Intellectual honesty is the cornerstone of the development and acquisition of knowledge and requires that the contribution of others be acknowledged. As a result, cheating or plagiarism on any assignment or examination are regarded as serious academic offenses. Students are advised to consult the 2009-2010 University of Calgary Calendar, which

presents a Statement of Intellectual Honesty and definitions and penalties associated with plagiarism, cheating, and other academic misconduct.

D. Safewalk:

The University of Calgary provides a safewalk service to any location on Campus, including the LRT, parking lots, bus zones, and campus housing. For Campus Security/Safewalk call 220-5333. Campus Security can also be contacted from any of the “Help” phones located around Campus.

E. Sociology Web Page:

<http://www.soci.ucalgary.ca>

F. USRI: At the completion of this course each student will be asked to complete an online Universal Student Ratings of Instruction (USRI) form.

G. Research Ethics:

Students are advised that any research with human subjects--including any interviewing (even with friends and family), opinion polling, or unobtrusive observation--must have the approval of the Departmental Ethics Committee. In completing course requirements, students must not undertake any human subjects research without discussing their plans with the instructor, to determine if ethics approval is required.

H. Emergency Evacuations:

In the case of fire or other emergency evacuation of this classroom / lab, please proceed to the assembly point by the Professional Faculties Food Court (Primary Assembly Point) or the Education Block Food Court (Alternate Assembly Point).

Schedule:

I. Week One – 9 January

Topic: Introduction
Overview of the Course
Reading: S&S Chapter 1: Introduction

Week One Lab – 9 January

Topic: Students' Research Interests and Proposal Outline and Timeline
No Lab Assignment

II. Week Two – 16 January

Topic: Is Sociology a Science? What "counts" as evidence?
Readings: a. S&S Chapter 2: The Nature of Science
b. Lieberman, S. (1992). "Einstein, Renoir and Greeley: Some thoughts about evidence in sociology." *American Sociological Review*, 57: 1-15.
c. (Suppl.) Coser, L.A. (1975). "Presidential Address: Two methods in search of a substance." *American Sociological Review*, 40:691-700.

Week Two Lab – 16 January

Topic: Causality
Reading: Morrison, K. (2012). "Searching for causality in the wrong places." *International Journal of Social Research Methodology*, 15,1:15-30.
Assignment: Lab 1 (Due Monday 21 Jan.)

III. Week Three – 23 January

Topic: Research Ethics
Readings: a. S&S Chapter 3
b. McAreavey, R. and Muir, J. (2011). "Research ethics committees: values and power in higher education." *International Journal of Social Research Methodology*, 14,5: 391-405.
c. (Suppl.) Crow, G., Wiles, R., Heath, S. and Charles, V. (2006). "Research ethics and data quality: The implications of informed consent." *International Journal of Social Research Methodology*. 9,2:83-95.

Week Three Lab – 23 January

Topic: Ethics Review
Reading: Course on Research Ethics (CORE) Tutorial.
http://www.ucalgary.ca/research/ethics/CORE_Tutorial
Assignments: Lab 2 (Due Monday 28 Jan.)
PROPOSAL: Research interests one pager (Due Monday 28 Jan.)

IV. Week Four – 30 January

Topic: Variables and Relationships

- Readings:*
- a. S&S Chapter 4: Elements of Research Design
 - b. Bryman, A. (2007). “The research question in social research: What is its role?” *International Journal of Social Research Methodology*, 10,1:5-20.
 - c. Hanneman, R. A. (2009). “Graphical Conventions for Causal Models.” Unpublished Notes.
 - d. (Suppl.) Stinchcombe, A.L. (1968). “The Logic of Scientific Inference” (pp. 15-37) in *Constructing Social Theories*. New York: Harcourt Brace and World.

Week Four Lab – 30 January

Topic: Research Questions, Variables, and Hypotheses

Reading: Kraaykamp, G. and Van Eijck, K. (2010). “The intergenerational reproduction of cultural capital: A threefold perspective.” *Social Forces*, 89,1:209-232.

Assignment: Lab 3 (Due Monday 4 Feb.)

V. Week Five – 6 February

Topic: Measurement

- Readings:*
- a. S&S Chapter 5: Measurement
 - b. Walby, S. and Armstrong, J. (2010). “Measuring equalities: data and indicators in Britain.” *International Journal of Social Research Methodology*, 13,3:237-249.
 - c. (Suppl.) Carmines, E.G., and Zeller, R.A. (1979). “Introduction” (pp. 9-16), “Validity” (pp. 17-27), “Classical Test Theory” (pp. 29-35) and “Assessing Reliability” (pp. 37-54) in *Reliability and Validity Assessment*. Sage University Series on Quantitative Applications in the Social Sciences, 07-017. Newbury Park, CA: Sage Publications.

Week Five Lab – 6 February

Topic: Measurement

Reading: Kraaykamp, G. and Koen van Eijck, K. (2010). “The intergenerational reproduction of cultural capital: A threefold perspective.” *Social Forces*, 89,1:209-232.

Assignment: Lab 4 (Due Monday 11 Feb.)

VI. Week Six – 13 February

Topic: Sampling

- Readings:*
- a. S&S Chapter 6: Sampling
 - b. Brick, J.M. (2011). “The Future of Survey Sampling.” *Public Opinion Quarterly*, 75,5:872-888.
 - c. (Suppl.) Henry, G.T. (1990). “Introduction” (pp. 9-16), “Sample Selection Approaches” (pp. 17-32), “Practical Sample Design” (pp. 33-59), “Sample Size” (pp. 117-128) in *Practical Sampling*. Sage University Series on Applied Social Research, Vol. 21. Newbury Park, CA: Sage Publications.

Week Six Lab – 13 February

Topic: Sampling

Reading: Hawdon, J. & Ryan, J. (2011). "Social relations that generate and sustain solidarity after a mass tragedy." *Social Forces*, 89,4:1363-1384.

Assignment: Lab 5 (Due Monday 25 February)

READING WEEK 18-22 Feb. (NO CLASSES)

VII. Week Seven – 27 February

Topic: Data Collection: Experiments

Readings: a. S&S Chapters 7 & 8: Experimentation and Experimental Designs
b. Aussems, M-C.E., Boomsma, A. and Snijders, T.A.B. (2011). "The use of Quasi-experiments in the social sciences: A content analysis." *Quality & Quantity*, 45,1:21-42.

Week Seven Lab – 27 February

Topic: Experiments

Reading: Conley, D. and McCabe, B.J. (2011). "Body Mass Index and Physical Attractiveness: Evidence from a combination image-alteration/list experiment." *Sociological Methods and Research*, 40,1: 6-31.

Assignment: Lab 6 (Due Monday 4 March)

PROPOSAL: Literature Review (Due Monday 4 March)

VIII. Week Eight – 6 March

Topic: Data Collection: Surveys

Readings: a. S&S Chapter 9: Survey Research
b. Groves, R.M. (2011). "Three Eras of Survey Research." *Public Opinion Quarterly*, 75,5:861-871.
c. (Suppl.) Fowler, F.F. (1993). "Methods of Data Collection" (pp. 54-68) in *Survey Research Methods*. Sage University Paper series on Applied Social Research Methods, Volume 1. Newbury Park, CA: Sage Publications.

Week Eight Lab – 6 March

Topic: Surveys

Reading: Hawdon, J. and Ryan, J. (2011). "Social relations that generate and sustain solidarity after a mass tragedy." *Social Forces*, 89,4:1364-1384.

Assignment: Lab 7 (Due Monday 11 March)

IX. Week Nine – 13 March

Topic: Data Collection: Surveys, Contd.

Readings: a. S&S Chapter 10: Survey Instrumentation
b. Fowler, F. J. (1993). "Designing Questions to be Good Measures." (pp. 69-93) in *Survey Research Methods*. Sage University Series on Applied Social Research, Volume 1. Newbury Park, CA: Sage Publications.

c. (Suppl.) Alreck, P.L. and R.B. Settle (1995). "Composing Questions" (pp. 87-112) and "Creating Scale Items" (pp. 113-142) in *The Survey Research Handbook: Guidelines and Strategies for Conducting a Survey*. Chicago: Irwin.

Week Nine Lab – 13 March

Topic: Surveys, contd.

Reading: Hartley, J. and Betts, L.R. (2010). "Four layouts and a finding: the effects of changes in the order of the verbal labels and numerical values on Likert-type scales." *International Journal of Social Research Methodology*, 13,1:17-27.

Assignment: Lab 8 (Due Monday 18 March)

PROPOSAL – Data, Research Questions, Variables, Hypotheses (Due Monday 18 March)

X. Week Ten – 20 March

Topic: Data Collection: Surveys, Contd.

Readings: a. Couper, M.P. (2000). "Web Surveys: A review of issues and approaches." *Public Opinion Quarterly*, 64:464-494.

b. Witte, J.C. (2009). "Introduction to the Special Issue on Web Surveys." *Sociological Methods and Research*, 37,3:283-290.

c. Denscombe, M. (2009). "Item non-response rates: A comparison of online and paper questionnaires." *International Journal of Social Research Methodology*, 12,4:281-291.

Week Ten Lab – 20 March

Topic: Online Surveys

Reading: Raento, M., Oulasvirta, A., and Eagle, N. (2009). "Smartphones: An emerging tool for social scientists." *Sociological Methods and Research*, 37,3:426-454.

Assignment: Lab 9 (Due Monday 25 March)

XI. Week Eleven – 27 March

Topic: Secondary Data Analysis

Readings: a. S&S Chapter 12: Research Using Available Data

b. Jenkins, S.P., Lynn, P., Jäckle, A. and Sala, E. (2008). "The feasibility of linking household survey and administrative record data: New evidence for Britain." *International Journal of Social Research Methodology*, 11,1:29-43.

Week Eleven Lab – 27 March

Topic: Secondary Data Analysis

Reading: King, M.D. and Bearman, P.S. (2011). "Socioeconomic status and the increased prevalence of autism in California." *American Sociological Review*, 76,2:320-346.

Assignment: Lab 10 (Due Monday 1 April)

PROPOSAL – Proposed Methods (Due Monday 1 April)

XII. Week Twelve – 3 April

Topic: Integrating Methods

Readings: a. S&S Chapter 13: Multiple Methods

b. Brannen, J. (2005). "Mixing Methods: The entry of qualitative and quantitative approaches into the research process." *International Journal of Social Research Methodology*, 8,3:173-184.

c. (Suppl.) Tashakkori, A., and Teddlie, C. (1998). "Introduction" (pp. 3-19), "Pragmatism and the Choice of Research Strategy" (pp. 20-39), "Research Design Issues" (pp. 40-58), "Conclusions and Future Directions" (pp. 167-169) in *Mixed Methodology: Combining Qualitative and Quantitative Approaches*. Sage University Paper series on Applied Social Research Methods, Volume 46. Newbury Park, CA: Sage Publications.

Week Twelve Lab – 3 April

Topic: Mixed Methods

Reading: O’Cathain A., Murphy, E., and Nicholl, J. (2007). "Why, and how, mixed methods research is undertaken in health services research in England: A mixed methods study." *BMC Health Services Research*, 7:85-96.

No Lab Assignment

XIII. Week Thirteen – 10 April

Topic: Evaluation Research

Reading: a. S&S Chapter 14: Evaluation Research

b. O’Cathain, A., Murphy, E., and Nicholl, J. (2007). "Why, and how, mixed methods research is undertaken in health services research in England: A mixed methods study." *BMC Health Services Research*, 7:85-96.

Week Thirteen Lab – 10 April

Topic: Presentation of Research Proposals

Final research proposals due: 19 April, noon, SS922.

