



Employment Relations 6010

Quantitative Methods

Fall 2014

Wednesdays 19:00-21:30, rm SN4022

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office hrs: Tues 9:30-11:30, or by appointment; rm AA4053

1 Course Overview & Objectives

This course provides an introduction to advanced quantitative social research methods. The course is practical in orientation and aims to achieve three learning objectives by the end of the term: (1) Students are comfortable reading and able to comprehend published quantitative research in mainstream sociological journals; (2) Students are able to design and implement social research projects with appropriate concern for ethics and using appropriate research tools; and (3) Students have greater awareness of quantitative methods of social research and are comfortable using statistical software appropriate to such methods. Overall, this course will attempt to prepare you for your future engagement with research methods whether in your own graduate research or in other professional experience. The course is by no means exhaustive will introduce but some of the many advanced techniques used by social scientists.

2 Course Texts & Statistical Software

Texts

Agresti, Alan, and Barbara Finlay. 2009. *Statistical methods for the social sciences*. Upper Saddle River, NJ: Pearson. 4th Edition. (Hereafter A&F)

Pevalin, David, and Karen Robson. 2009. *The Stata survival manual*. McGraw-Hill International. (Hereafter P&R)

Software

Course instruction will be provided in Stata version 12. Arrangements for a reduced rate purchase of Stata will be discussed in the first class. Use of other software for the final project (SPSS, SAS, R, etc.) is acceptable, but instruction in and support for other programs will not be offered by the instructor. Purchasing a license for Stata for use at home is advisable, as access to the computer labs on campus can sometimes be difficult on evenings and weekends.

3 Course Requirements

Requirement	Value	Due Date
1. Take-Home Exercises (3)	10% ea.	Sept. 24; Oct. 22; Nov. 19
2. Article Deconstruction	15%	Oct. 1
3. Report Proposal	5%	Oct. 8
4. First Draft of Report	10%	Nov. 5
5. Final Draft of Report	30%	Dec. 3
6. Report Presentation	10%	Dec. 3

1. Take-Home Exercises (30%): Respond to the questions as fully as possible, detailing the steps taken to arrive at the answer and providing relevant backing evidence to support your work. This work must be completed individually.

Exercise #1 (10%): *Due September 24th.* Assignment using questions and data provided on September 10th.

Exercise #2 (10%): *Due October 22rd.* Assignment using questions and data provided on October 8th.

Exercise #3 (10%): *Due November 19th.* Assignment using questions and data provided on November 5th.

2. Article Deconstruction (15%): *Due October 1st.* Find a quantitative sociology article on a subject of interest to you from one of the journals in the list provided by Dr. Swiss. Read the article and prepare a three page summary which deconstructs and summarizes the article into the following parts: (1) Research problem; (2) Theoretical Framework; (3) Data; (4) Hypotheses; (5) Results and Main Findings.

3. Report Proposal (5%): *Due October 8th.* Prepare a two-page overview of your proposed research project for this class. Your proposal should outline the research question, context, and rationale for the research, as well as the anticipated data set, sample, and any other relevant issues.

4. First Draft of Report (10%): *Due November 5th.* This 20-25 page report will use quantitative methods to examine an employment relations question of your choosing using existing survey data. You are expected to identify your own research question, data, and to employ appropriate quantitative techniques (at minimum cross-tabulations and appropriate visualization) to answer your question(s). The report should resemble an analysis prepared by a consultant or HR professional and include the following sections: Table of Contents, Executive Summary, Introduction; Context

or Literature Review; Methodology & Data; Analysis; Findings; and Recommendations. Formatting will be discussed extensively in class.

5. Final Report (30%): *Due December 3rd.* This will be the final draft of the research paper outlined above.

6. Presentation (10%): *December 3rd.* You will prepare and deliver a maximum 10 minute presentation of your final research report. Please make use of slides/visual aids and stick to the specified time limit. Paper presentation tips will be discussed in class.

4 Course Calendar

Week	Topic & Readings
Week 1 – Sept 3	Working with Data and Intro to Stata A&F Chapters 1-4; P&R Chapters 1-4
Week 2 – Sept 10	Ethics, Surveys, and Research Design A&F Chapters 1-4; P&R Chapters 1-4; Assigned Article
Week 3 – Sept 17	Central Tendency & Distributions A&F Chapters 1-4; P&R Chapters 5; Assigned Article
Week 4 – Sept 24	Categorical Data & Cross-Tabulation A&F Chapter 8 ; P&R Chapters 6; Assigned Article
Week 5 – Oct 1	Data Visualization 1 A&F Chapter 8 ; P&R Chapters 5
Week 6 – Oct 8	Data Visualization 2 A&F Chapter 8 ; P&R Chapters 5
Week 7 – Oct 15	Inference & Hypothesis Testing 1: Chi-Square A&F Chapters 5-7; P&R Chapter 6-7
Week 8 – Oct 22	No Class: Free Lab Session
Week 9 – Oct 29	Inference & Hypothesis Testing 2: T-Tests A&F Chapters 5-7; P&R Chapter 6-7
Week 10 – Nov 5	Correlation & Linear Regression A&F Chapter 9; P&R Chapter 6-8; Assigned Article
Week 11 – Nov 12	Multiple Regression & Dummy Variables A&F Chapters 10-13, 15; P&R Chapter 8-9
Week 12 – Nov 19	Communicating your Results A&F Chapter 16; P&R Chapter 9
Week 13 – Nov 26	In-Class Working Session for Final Report
Week 14 – Dec 3	Student Presentations

5 Timely Submission of Course Assignments

Assignments are due when specified on the course outline above. No extensions will be granted except in the case of a documented medical issue or emergency. Late assignments will be penalized by 5% of the overall assignment value per day late.

If you require a deferred final exam or assignment/paper etc. for medical reasons, please inform me in a timely manner. If a medical condition persists for longer than 5 days, please secure documentation from a medical professional.

6 Academic Misconduct

Academic misconduct is an act committed by a student to distort the marking of assignments, tests, examinations, and other forms of academic evaluation. Academic misconduct is neither accepted nor tolerated by the University. Anyone found guilty of academic misconduct is liable to severe academic sanctions. Some examples of academic offences include:

engaging in any form of plagiarism or cheating;

presenting falsified research data;

handing in an assignment that was not authored by the student; or

submitting the same assignment in more than one course, without the written consent of the professors concerned.

For more information, please refer to Section 4.12 of the MUN Calendar regarding “Academic Misconduct” of Graduate Students:

<http://www.mun.ca/regoff/calendar/sectionNo=GRAD-0029>