SOCIOMETRY 7130—STATISTICS II  
(Spring Semester, 2012) Tuesdays, 2:00 – 5:00 PM, Beh Sci 101

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Office Hours: By appointment

Course Summary and Objectives

This applied graduate-level seminar covers foundational statistical techniques common in sociological research. Building on the material covered in SOC 6120, this course introduces students to various multiple regression methods, beginning with a thorough overview / review of cross-sectional OLS regression, and continues by covering cross-sectional models for binary, unordered, and ordinal variables as well as models for count outcomes. The course will also provide gentle introductions to the analysis of panel data and the use of instrumental variables as well as other topics if time permits. The seminar puts an emphasis on fundamental concepts and the successful application of the covered methods as well as the ability to interpret the results verbally and in writing. While various software applications are capable of estimating most or all of the covered techniques, we will use Stata in the seminar. The course is split between formal lectures and lab sessions. The instructor will take an active role in the labs, which will involve a series of problem sets designed to help students learn how to appropriately and effectively execute and interpret the different model estimation techniques.

Course Requirements and Grading

Students are required to take three quizzes (each worth 25% of final grade), conduct their own short quantitative study and write a “research note” style article (worth 20% of final grade), and present their research to the class at the end of the semester (worth 5% of final grade). For this project students are encouraged to find and use datasets that align with their substantive interests—perhaps the dataset(s) that will be used for MA or PhD projects! Students will be given data and problem sets to complete in the labs. While these problem sets will not be graded and applied to final grades, they will be evaluated in general for accuracy. More specifics concerning all requirements and grading will be discussed on the first day of class.

Required Books (available at the campus bookstore)

   ***This book is called PA1999 in the schedule below***
   ***This book is called PA2009 in the schedule below***
   ***This book is called LF2006 in the schedule below***
Class Policies and Student Responsibilities

Students and faculty at the University of Utah are obligated to behave in accordance with the ordinances of the University. The Student Code (or Students’ Rights and Responsibilities) is located on the Web at:

http://www.admin.utah.edu/ppmanual/8/8-10.html

You are encouraged to review this document. All of the rights and responsibilities applicable to both the student and the faculty member will be observed during the semester.

Academic Integrity and Plagiarism

Academic misconduct, including plagiarism, is a serious offense. The following regarding academic integrity and plagiarism is taken from the University of Utah’s Student Code: “Academic misconduct” includes, but is not limited to, cheating, misrepresenting one’s work, inappropriately collaborating, plagiarism, and fabrication or falsification of information, as defined further below. It also includes facilitating academic misconduct by intentionally helping or attempting to help another to commit an act of academic misconduct.

a. “Cheating” involves the unauthorized possession or use of information, materials, notes, study aids, or other devices in any academic exercise, or the unauthorized communication with another person during such an exercise. Common examples of cheating include, but are not limited to, copying from another student's examination, submitting work for an in-class exam that has been prepared in advance, violating rules governing the administration of exams, having another person take an exam, altering one's work after the work has been returned and before resubmitting it, or violating any rules relating to academic conduct of a course or program.

b. Misrepresenting one's work includes, but is not limited to, representing material prepared by another as one's own work, or submitting the same work in more than one course without prior permission of both faculty members.

c. “Plagiarism” means the intentional unacknowledged use or incorporation of any other person's work in, or as a basis for, one's own work offered for academic consideration or credit or for public presentation. Plagiarism includes, but is not limited to, representing as one's own, without attribution, any other individual’s words, phrasing, ideas, sequence of ideas, information or any other mode or content of expression.

The Student Code states that academic misconduct can be sanctioned in the following ways:

“Academic sanction” means a sanction imposed on a student for engaging in academic or professional misconduct. It may include, but is not limited to, requiring a student to retake an exam(s) or rewrite a paper(s), a grade reduction, a failing grade, probation, suspension or dismissal from a program or the University, or revocation of a student’s degree or certificate. It may also include community service, a written reprimand, and/or a written statement of misconduct that can be put into an appropriate record maintained for purposes of the profession or discipline for which the student is preparing.
**Faculty Responsibilities**

As the instructor for the course, I will:

- Convene classes unless valid reason and notice given
- Perform and return evaluations in a timely manner
- Inform you of:
  1. General course content
  2. Course activities
  3. Course evaluation methods
  4. Course grading scale
  5. Course schedule of meetings, topics, and due dates.
- Ensure that the class environment is conducive to learning. This includes limiting student use of cell phones, reading newspapers during class, talking during class, arriving late and leaving early and other disruptive behavior.

Other faculty rights and responsibilities are further detailed online: [http://www.admin.utah.edu/ppmanual/8/8-12-4.html](http://www.admin.utah.edu/ppmanual/8/8-12-4.html)

**Americans with Disabilities Act (ADA)**

The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.

All written information in this course can be made available in alternative format with prior notification to the Center for Disability Services.

**TENTATIVE COURSE SCHEDULE**

***This schedule and the covered material are likely to change before and/or during the semester***

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**Week 1 – January 10**

**NO CLASS (PROFESSOR OUT OF TOWN FOR QCA WORKSHOP)**

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**Week 2 – January 17**

Introductions & Overview of seminar
OLS
Assigned reading: PA1999, chapters 1 through 5
Week 3 – January 24

OLS continued
Assigned reading: PA1999, chapters 6 through 8

Week 4 – January 31

Quiz #1

Week 5 – February 7

Binary Logistic Regression
Assigned reading: LF2006, chapter 4 (but skim chapters 1-3!)

Week 6 – February 14

Binary and Multinomial Logistic Regression
Assigned reading: LF2006, chapters 4 and 6

Week 7 – February 21

Multinomial Logistic Regression
Assigned reading: LF2006, chapter 6

Week 8 – February 28

Quiz #2

Week 9 – March 6

Models for Ordinal Outcomes
Assigned reading: LF2006, chapter 5

Week 10 – March 20 (NO CLASS ON MARCH 13—SPRING BREAK)

Models for Ordinal Outcomes, Models for Count Outcomes
Assigned reading: LF2006, chapters 5 and 8

Week 11 – March 27

Models for Count Outcomes
Assigned reading: LF2006, chapter 8
Week 12 – April 3

*Quiz #3*

Week 13 – April 10

Panel Analysis

*Assigned reading: PA2009, chapters 1 and 2*

Week 14 – April 17

Panel Analysis (?), Instrumental Variables (?), Other TBD (?)

*Assigned reading: TBD*

Week 15 – April 24

*Presentations, Final Paper Due*