Course Summary and Objectives

This applied graduate-level seminar provides an introduction to increasingly common statistical methods appropriate for conducting comparative research. The primary focus of the seminar is on the analysis of panel data (pooled cross-sectional time series), which involves repeated measures of an outcome over time on multiple units (e.g., individuals, households, firms, countries). The course puts an emphasis on fundamental concepts and the successful application of such methods, with attention paid toward all stages of the analyses, beginning with the creation and organization of panel datasets and ending with the writing of empirically-focused manuscripts. Students will also learn how to read and assess published works in sociology and its sister disciplines that use these and related methods.

It is assumed that students enrolled in this course have a comfortable understanding of cross-sectional regression analysis and related methods, especially cross-sectional OLS linear regression and logistic regression. We will use a combination of statistical software applications. However, the overwhelming majority of analyses will be conducted using Stata. 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 estimation techniques.

Course Requirements and Grading

Students are required to take three quizzes (each worth 20% of final grade), conduct their own panel study and write a "research note" style article (worth 25% 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. Students are also required to write brief assessments of published articles that are assigned by the instructor or that the students get instructor approval for (worth 10% of final grade). These are articles that employ the methods covered in the seminar. Such an exercise is quite helpful at learning the methods and evaluating how researchers use such methods as well as how researchers justify their use. Students will be given 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 requirements and grading will be discussed on the first day of class.

Required Book (available at the campus bookstore)


- All additional required readings are available on the course’s WEBCT page or in hard copy from the instructor.
Highly Recommended Books (*starred books are especially recommended!)

*Baum, Christopher. 2006. *An Introduction to Modern Econometrics Using Stata.* Stata Press.


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

**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 AND ASSIGNED READINGS

***THIS SCHEDULE AND THE COVERED MATERIAL ARE LIKELY TO CHANGE BEFORE AND/OR DURING THE SEMESTER***

Week 1 – August 25

   Introductions, review of cross-sectional analysis

Week 2 – September 1

   Logic of analyzing change within and between cases
   Constructing panel datasets
   Graphing change

   Assigned reading:
   *Frees, pages 1-12
   Others TBA

Week 3 – September 8

   “Simple” panel models (e.g., IV at $T_1$, DV at $T_1$ and $T_2$)

   Assigned reading:
   Finkel, pages 3-9
   Others TBA

Week 4 – September 15

   First difference models (e.g., IV at $T_1$ and $T_2$, DV at $T_1$ and $T_2$)

   Assigned reading:
   Allison, pages 1-14
   Others TBA

Week 5 – September 22

   Quiz #1
Week 6 – September 29

Introduction to linear random effects (RE) models and fixed effects (FE) models

Assigned reading:
Allison, pages 14-23
Baum, pages 219-231
Kennedy, pages 281-295

Week 7 – October 20

Nuts and bolts of linear RE and FE models
Extensions, interactions, standard errors, making choices

Assigned reading:
TBA

Week 8 – October 27

Quiz #2

Week 9 – November 3

Binary outcomes
Logistic regression (RE and FE models)

Assigned reading:
Allison, pages 28-48
Others TBA

Week 10 – November 10

Count Outcomes
Poisson regression (RE and FE models)
Negative binomial regression (RE and FE models)

Assigned reading:
Allison, pages 49-69
Others TBA
Week 11 – November 17

Quiz #3

Week 12 – December 1

Research Presentations

Week 13 – December 8

Research Presentations
Final Paper Due