ECON 7800

Econometrics I - Spring 2018
3 Credits

General Information[1]

Prerequisites: Econ 3620 and Econ 3640
Time: Mondays and Wednesdays from 3:00 p.m.-4:20 p.m.
Location: M BLDG 72 RM 117, W AEB 330

Instructor: Eric Sjöberg
E-mail: eric.sjoberg@economics.utah.edu
Office Hours: Wednesdays 1PM - 2 PM or by appointment
Location: Bldg 73, Rm 238

Course Overview

In this course we will cover some important topics in the empirical analysis of micro and macro data. We will discuss selected cross-section, panel data techniques as well as quasi-experimental and experimental methods. In particular, we will study quasi-experimental methods such as instrumental variables and difference in differences with a focus on the possibilities of using non-experimental data to estimate causal effects. We will also talk about the advantages and drawbacks of using randomized controlled experiments in social science studies. Throughout the course, we will focus on replicating published research that employ the techniques we are studying.

Course Objectives

In this course, you will be prepared to:

- Use Stata to analyze experimental and non-experimental data.
- Derive common estimators and address common violations of the underlying statistical assumptions.
- Apply and criticize several different econometric methods that can be used to extract causal estimates from non-experimental data.
- Analyze, criticize, and replicate published research papers.

For specific topics, please see the tentative schedule in this syllabus.

Required Texts

J. Angrist and Pischke, J. "Mostly Harmless Econometrics", latest edition. This is the book that the lectures will be based on. I will assume you have access to another more classical textbook such as Greene - "Econometric Analysis", Wooldridge - "Econometrics Analysis of Cross Section and Panel Data" or C. Cameron and Trivedi, P. "Microeconometrics".

[1]This syllabus is meant to serve as an outline and guide for the course. Please note that it may be modified at any time with reasonable notice to students. The schedule might also be modified at any time to accommodate the needs of the class. Should you have any questions or concerns about the syllabus, please contact me for clarifications.

Teaching and Learning Methods

The course will be based on in-class lectures. We will go through theory and I will demonstrate how to apply the techniques that we learn in practice. We will also have discussions – where active participation is expected – of how econometrics can be applied and how econometrics results can be interpreted. We will work on replication of published papers in class as well as on assignments. There will be a set of assignments (preliminary 6) for you to hand in. Many of these will require analysis with the help of Stata. I will introduce you to the software and also give you a brief reference guide on the most common commands.

Computers and Software

We will use software to solve some of the assignments in this course. The main program is Stata and the solutions to the assignments will be presented using this program. You will have access to Stata through the university or you can purchase a student version of the program. If you have a strong desire to use another statistical software, please contact me in advance.

Policies

You should speak with me in advance to request special consideration in the case of some extenuating circumstance that prevents you from taking an exam or submitting an assignment at the scheduled time. The final exam will not be given at multiple dates in order to accomodate travel plans. Attendance is mandatory and will be weighted for the final grade.

Grading Policies

Evaluation will be based according to the table below. The midterm will be an in-class exam. We will decide jointly whether the final evaluation should be a traditional exam or a project. If we decide on a traditional final it will take place as specified by the final exam schedule (link).

Activity	Grade Weighting
Assignments	30%
Midterm Exam	25%
Final Exam/Paper	30%
Advance readings and attendance	15%

Grading Scale

Grade	Score (s)				
A	0.92	$\leq$	s		
A$^-$	0.9	$\leq$	s	$<$	0.92
B$^+$	0.88	$\leq$	s	$<$	0.9
B	0.82	$\leq$	s	$<$	0.88
B$^-$	0.8	$\leq$	s	$<$	0.82
C$^+$	0.75	$\leq$	s	$<$	0.80
C	0.70	$\leq$	s	$<$	0.75
C$^-$	0.65	$\leq$	s	$<$	0.70
D$^+$	0.63	$\leq$	s	$<$	0.65
D	0.57	$\leq$	s	$<$	0.63
D$^-$	0.55	$\leq$	s	$<$	0.57
E			s	$<$	55

Students with disabilities

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.

Wellness Statement

Personal concerns such as stress, anxiety, relationship difficulties, depression, cross-cultural differences, etc., can interfere with a student's ability to succeed and thrive at the University of Utah. For helpful resources contact the Center for Student Wellness; www.wellness.utah.edu; 801-581-7776. Class rosters are provided to the instructor with the students legal name as well as Preferred first name (if previously entered by you in the student profile section of your CIS account). Please advise me of any name or pronoun changes (and update CIS) so I can help create a learning environment in which you, your name, and your pronoun will be respected.

Tentative Schedule

All dates are tentative, major changes will be done in consultation with students. Each topic will have assigned readings.

Week	Mon	Wed	Topic	Note
1	1/8	1/10	OLS, Hypothesis testing, Specification, Bias	
2		1/17	OLS, Hypothesis testing, Specification, Bias	MLK JR Holiday
3	1/22	1/24	OLS, Hypothesis testing, Specification, Bias	
4	1/29	1/31	Index models	
5	2/5	2/7	Index models	
6	2/12	2/14	Experiments	
7		2/21	Midterm	President's Day
8	2/26	2/28	Instrumental Variables	
9	3/5	3/7	Instrumental Variables	
10	3/13	3/14	Panel Data	
11				Spring Break
12	3/26	3/28	Panel Data	
13	4/2	4/4	Regression Discontinuity	
14	4/9	4/11	Regression Discontinuity	
15	4/16	4/18	Student Presentations	
16	4/23		Student Presentations	

CSBS EMERGENCY ACTION PLAN

BUILDING EVACUATION

EAP (Emergency Assembly Point) – When you receive a notification to evacuate the building either by campus text alert system or by building fire alarm, please follow your instructor in an orderly fashion to the EAP marked on the map below. Once everyone is at the EAP, you will receive further instructions from Emergency Management personnel. You can also look up the EAP for any building you may be in on campus at http://emergencymanagement.utah.edu/eap.

CAMPUS RESOURCES

U Heads Up App: There's an app for that. Download the app on your smartphone at alert.utah.edu/headsup to access the following resources:

- **Emergency Response Guide:** Provides instructions on how to handle any type of emergency, such as earthquake, utility failure, fire, active shooter, etc. Flip charts with this information are also available around campus.
- **See Something, Say Something:** Report unsafe or hazardous conditions on campus. If you see a life threatening or emergency situation, please call 911!

Safety Escorts: For students who are on campus at night or past business hours and would like an escort to your car, please call 801-585-2677. You can call 24/7 and a security officer will be sent to walk with you or give you a ride to your desired on-campus location.

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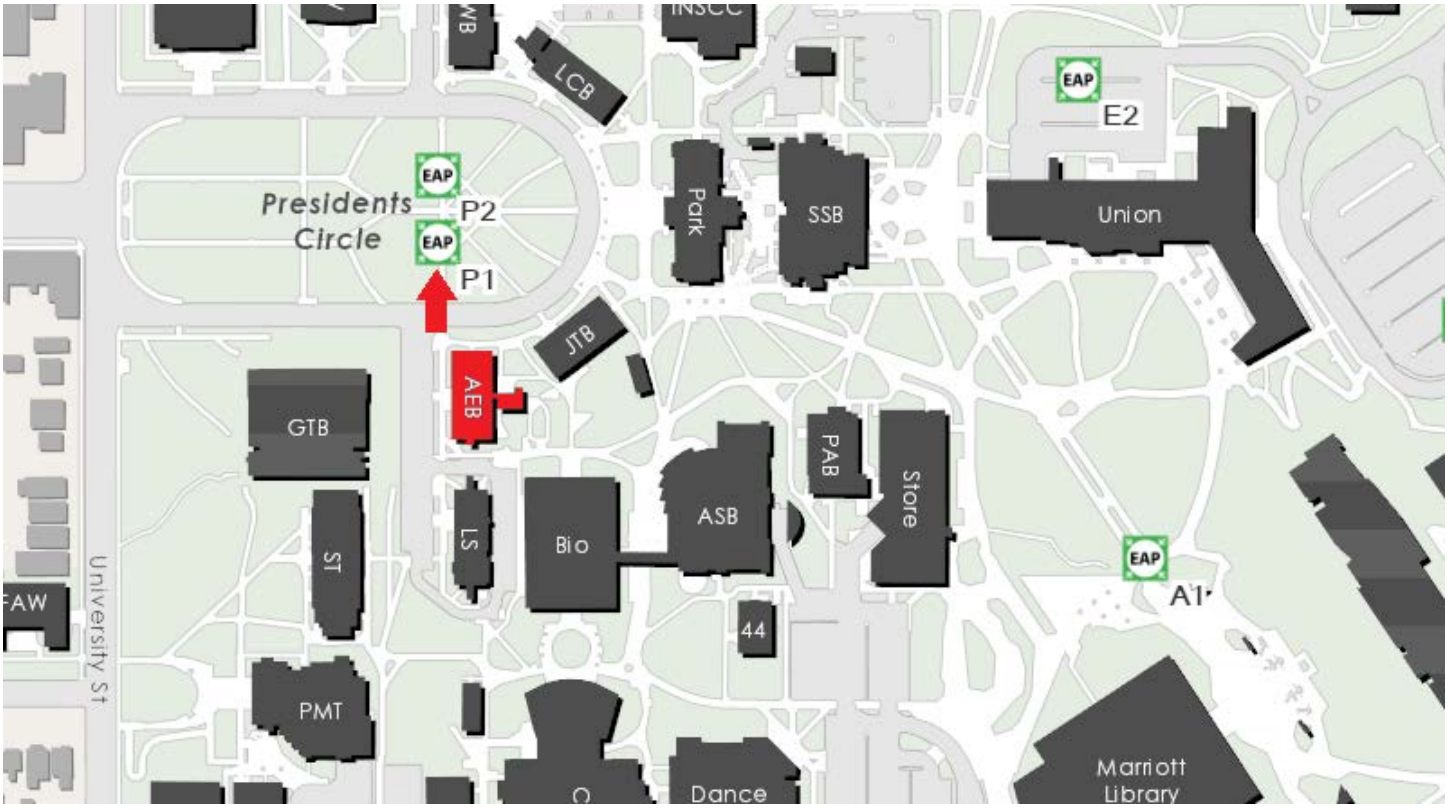

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