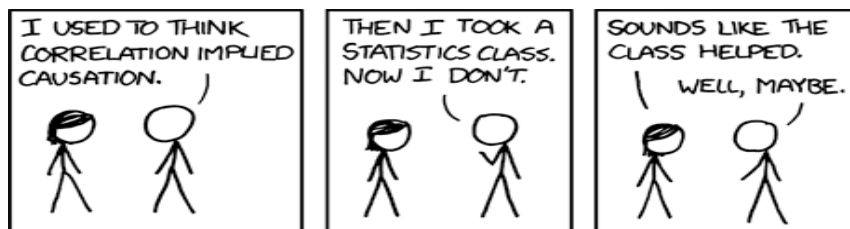


Economics 4650: Principles of Econometrics (3 credits)¹

Fall 2019



Instructor:	Pavitra Govindan
Classroom:	GC 1855
Lectures:	Tue & Thu 2:00 PM - 3:20 PM
Office Hours/Address:	Tue 11:00-12:00 PM in GC 4228
Email:	Pavitra.govindan@utah.edu
Teaching Assistant:	Aashima Sinha
Email:	u1216077@utah.edu

Course Description

In this course, you will be exposed to data analysis from the lens of an economist. You will learn about statistical estimation, inference, causal analysis methods and forecasting. The emphasis of the course will be on applications, but you will be exposed to foundational econometric theory that will help you explore more advanced topics.

Goals

At the end of this course, you will be able to:

- Understand the difference between causation and correlation in empirical data and policy debates.
- Understand and critique the empirical results in Economics journals and newspaper articles
- Conduct basic empirical analysis of data using Stata which includes

¹ This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of the class. Any changes will be announced in class and posted on Canvas under Announcements.

- Estimating multivariate OLS regressions of different functional forms
- Interpreting multivariate regression estimates.
- Perform causal analysis using techniques learned in class.

Pre-requisites

Econ 3620 Mathematics for Economists
 Econ 3640 Probability and Statistical Inference

Assessment

- **Assignments (35%):** There will be a set of six assignments (5 points each) and a couple of short reading assignments (worth a total of 5 points) for you to hand in. Some of these will require analysis using Stata. I will introduce you to the software and give you a brief reference guide to common STATA commands.
- **Midterm Exam (30%):** The midterm will be a take-home project.
- **Final Exam (35%):** The final exam is a traditional exam and will take place on Tuesday, **December 10, 2019 1:00 – 3:00 pm in GC 1855.**

Required Textbook

Using Econometrics: A Practical Guide 7th Edition by A.H. Studenmund,
 (here after referred to as (S) in the syllabus)

Optional Textbooks

Real econometrics by Michael A. Bailey
Introduction to Econometrics by Stock and Watson, and
Introductory Econometrics: A Modern Approach by Jefferey Wooldridge

Teaching and Learning Methods

This course will be based on in-class lectures. We will study econometric theory and techniques and use software to apply those techniques to data. We will have classroom discussions about how econometrics can be used to analyze real life problems and how the analysis can be interpreted. Active participation in these discussions is encouraged.

Computers and Software

You will require Stata to solve some of the assignments in this course. 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.

Classroom Policies

You should inform 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. If the extenuating circumstances pertain to medical reasons, I require you to submit a doctor's note to get an extension on an assignment or exam. The final exam will not be given at multiple dates to accommodate travel plans. Consistent attendance is strongly recommended but attendance is not taken.

Grading Scale

Grading in this class will be done on a curve. The following table gives the grading scale.

Grade	Score (s)
A	$94 \leq s$
A-	$90 \leq s < 94$
B+	$87 \leq s < 90$
B	$83 \leq s < 87$
B-	$80 \leq s < 83$
C+	$77 \leq s < 80$
C	$73 \leq s < 77$
C-	$70 \leq s < 73$
D+	$65 \leq s < 70$
D	$60 \leq s < 65$
D-	$50 \leq s < 60$
E	$s < 50$

Tentative Schedule

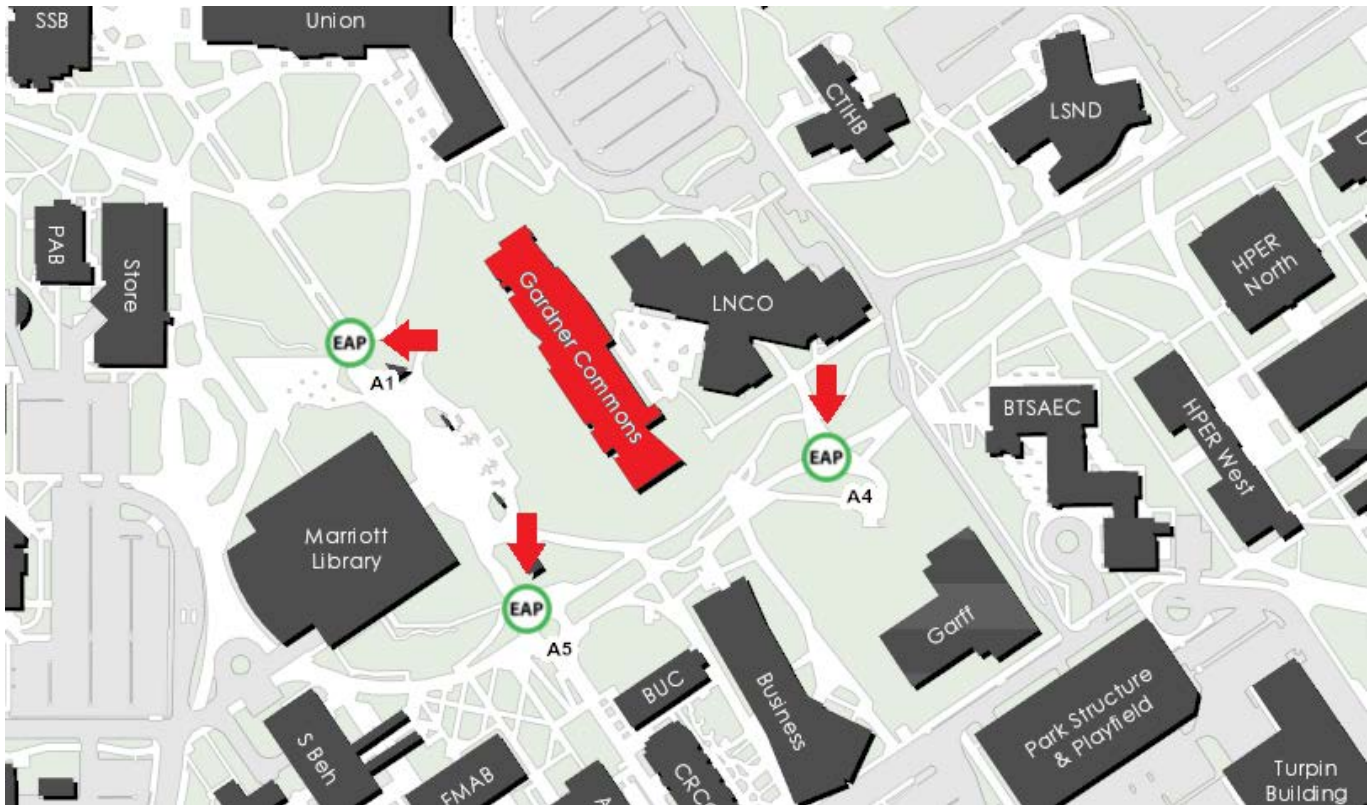
Week	Tue	Thu	Chapter(s), topic	Note
1	8/20	8/22	Ch 17 Statistical Principles, Ch 1 Introduction	
2	8/27	8/29	Ch 2 OLS	A1, 8/29 ^a
3	9/3	9/5	Ch 3 Learning to use regressions, Stata Lab	
4	9/10	9/12	Ch 4 The classical model	A2, 9/12
5	9/17	9/19	Ch 4 The classical model, Ch 5 Hypothesis Testing	
6	9/24	9/26	Ch 5 Hypothesis Testing	A3, 9/26
7	10/1	10/3	Ch 5 Hypothesis Testing, Midterm	Midterm, 10/3
8	10/8	10/10	-----	FALL BREAK
9	10/15	10/17	Ch 8, 9, 10 Multicollinearity/Serial Correlation/Heteroscedasticity	
10	10/22	10/24	Ch 6,7 Specification Issues	A4, 10/24
11	10/29	10/31	Ch 16 Experimental Methods	
12	11/5	11/7	Causal Analysis (IV, DID, RDD)	A5, 11/7
13	11/12	11/14	Ch 13 Dummy dependent variables	
14	11/19	11/21	Ch 12 Time Series	A6, 11/21
15	11/26	11/28	Thanksgiving Break	
16	12/3	12/5	Review	
17	12/10		Final Exam (1-3 PM)	

^a All assignments are due at the beginning of class on the due date.

University Policies

- 1. *The Americans with Disabilities Act.*** 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 this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, (801) 581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.
- 2. *University Safety Statement.*** The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.
- 3. *Addressing Sexual Misconduct.*** Title IX makes it clear that violence and harassment based on sex and gender (which includes sexual orientation and gender identity/expression) is a civil rights offense subject to the same kinds of accountability and the same kinds of support applied to offenses against other protected categories such as race, national origin, color, religion, age, status as a person with a disability, veteran's status or genetic information. If you or someone you know has been harassed or assaulted, you are encouraged to report it to the Title IX Coordinator in the Office of Equal Opportunity and Affirmative Action, 135 Park Building, 801-581-8365, or the Office of the Dean of Students, 270 Union Building, 801-581-7066. For support and confidential consultation, contact the Center for Student Wellness, 426 SSB, 801-581-7776. To report to the police, contact the Department of Public Safety, 801-585-2677(COPS).
- 4. *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 at www.wellness.utah.edu or 801-581-7776.
- 5. *Student Names & Personal Pronouns statement.*** Class rosters are provided to the instructor with the student's legal name as well as "Preferred first name" (if previously entered by you in the Student Profile section of your CIS account, which managed can be managed at any time). While CIS refers to this as merely a preference, I will honor you by referring to you with the name and pronoun that feels best for you in class or on assignments. Please advise me of any name or pronoun changes so I can help create a learning environment in which you, your name, and your pronoun are respected. If you need any assistance or support, please reach out to the LGBT Resource Center. https://lgbt.utah.edu/campus/faculty_resources.php

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.