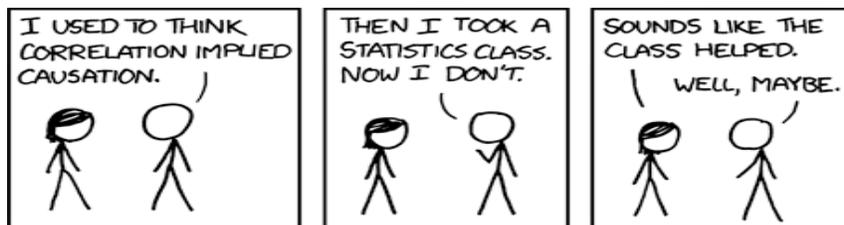


Economics 4650: Principles of Econometrics (3 credits)¹

Spring 2019



Instructor:	Pavitra Govindan
Classroom:	BEH S 115
Lectures:	Tue & Thu 2:00 PM - 3:20 PM
Office Hours:	Tue 3:30-4:30 PM in GC 4228
Email:	Pavitra.govindan@utah.edu
Teaching Assistant:	Pedro Hugo G. Clavijo-Cortes
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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.

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.

- Understand and critique the empirical results in Economics journals and newspaper articles
- Conduct basic empirical analysis of data using Stata which includes
 - 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

- **Class participation and quizzes (20%):** We will have surprise in-class quizzes to assess your understanding of the lectures. You will get points for participating in the quiz and extra points for answering the questions correctly. Please download TopHat on your phone/laptop to access these quizzes. The subscription for this app is \$10 per semester. If you have any questions/concerns about this, please contact me.
- **Assignments (30%):** There will be a set of six assignments 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 (25%):** The midterm will be a take-home project.
- **Final Exam (25%):** The final exam is a traditional exam and will take place as specified by the final exam schedule.

Reference Book

Real econometrics by Michael A. Bailey

Optional Textbooks

You can also use the following books as reference:

Using Econometrics: A Practical Guide by A.H. Studenmund,
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.

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 an approximate grading scale.

Grade	Score (s)
A	$90 \leq s$
A-	$85 \leq s < 90$
B+	$80 \leq s < 85$
B	$75 \leq s < 80$
B-	$70 \leq s < 75$
C+	$65 \leq s < 70$
C	$60 \leq s < 65$
C-	$55 \leq s < 60$
D+	$50 \leq s < 55$
D	$45 \leq s < 50$
D-	$40 \leq s < 45$
E	$s < 40$

ADA Statement

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.

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.

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). 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, on papers, exams, group projects, etc. 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. If you need assistance getting your preferred name on your UIDcard, please visit the LGBT Resource Center Room 409 in the Olpin Union Building, or email bpeacock@sa.utah.edu to schedule a time to drop by. The LGBT Resource Center hours are M-F 8am-5pm, and 8am-6pm on Tuesdays.

Tentative Schedule

Week	Tue	Thu	Chapter(s), topic	Note
1	1/8	1/10	Statistics refresher, appendices A-I	
2	1/15	1/17	Introduction to regression analysis, OLS, Ch 1, 2	A1, 1/17 ^a
3	1/22	1/24	OLS, Learning to use regressions, Ch 3	
4	1/29	1/31	Stata Introduction, The classical model, Ch 14	A2, 1/31
5	2/5	2/7	The classical model	
6	2/12	2/14	Hypothesis Testing, Ch 4	A3, 2/14
7	2/19	2/21	Hypothesis Testing	
8	2/26	2/28	Specification Issues, Ch 5, 6, 7	Midterm, 2/28
9	3/5	3/7	Specification Issues, Ch 5, 6, 7	
10	3/12	3/14		Spring Break
11	3/19	3/21	Experimental Methods, Ch 10, Diff-in-diff, Ch 8	A4, 3/21
12	3/26	3/28	Instrumental Variables, Ch 9, Regression Discontinuity, Ch 11	
13	4/2	4/4	Dummy dependent variables, Ch 12	A5, 4/4
14	4/9	4/11	Intro to Time Series, Ch 13	
15	4/16	4/18	Discuss A6, Review	A6, 11/16
16	4/23		Review	

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