Economics 4650

Principles of Econometrics - Fall 2014
3 Credits

General Information[1]

Prerequisites: Econ 3620 and Econ 3640
Time: Mondays and Wednesdays from 11:50-1:10 p.m.
Location: M LI 1160

Instructor: Eric Sjöberg
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Office Hours: Thursdays 9.30 AM - 10.30 AM or by appointment
Location: OSH 374

Course Overview

In this course, we will explore basic techniques that let us use real world data to study economic concepts and theories. The emphasis of this course will be on applications but it will also give you a foundation from which you will be able to explore more advanced econometric concepts. Topics include data analysis, statistical estimation, inference, and forecasting. The way of thinking and the econometric tools that you will study during the course have strong relevance, both for your academic future and a private sector career.

Course Objectives

In this course, you will be prepared to:

- Use Stata to do basic analysis of data.

- Have a basic understanding of the theory behind multivariate regression analysis.

- Detect and deal with violations of classical model assumptions.

- Using real data, a) estimate multivariate regressions of different functional forms and b) present and interpret the multivariate regression estimates.

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

Required Texts

Studenmund, A.H. "Using Econometrics: A Practical Guide", latest edition. This is the book that the lectures will be based on. Other suggested (but not required) texts are Stock and Watson - "Introduction to Econometrics" and Wooldridge - "Introductory Econometrics".

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[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 encouraged, of how econometrics can be applied and how econometrics results can be interpreted. There will be a set of assignments (preliminary 5) for you to hand in. Some 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. You can obtain the Studenmund textbook together with Stata Small and you are recommended to purchase this bundle. 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. Consistent attendance is strongly recommended but attendance is not taken.

Grading Policies

Evaluation will be based on the following.

Activity	Grade Weighting
Assignments	30%
Midterm Exam	20%
Final Exam	50%

Grading Scale				
Grade	Score (s)			
A	0.92	$\geq$ s		
A⁻	0.9	$\geq$ s	$<$	0.92
B⁺	0.88	$\geq$ s	$<$	0.9
B	0.82	$\geq$ s	$<$	0.88
B⁻	0.8	$\geq$ s	$<$	0.82
C⁺	0.75	$\geq$ s	$<$	0.80
C	0.70	$\geq$ s	$<$	0.75
C⁻	0.65	$\geq$ s	$<$	0.70
D⁺	0.63	$\geq$ s	$<$	0.65
D	0.57	$\geq$ s	$<$	0.63
D⁻	0.55	$\geq$ 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.

Tentative Schedule

A more comprehensive reading list will be available at the first lecture. I recommend that you read the relevant sections in preparation for each class to stimulate in-class discussions.

Week	Mon	Wed	Chapter(s), topic	Note
1	8/25	8/27	Ch.17, Statistical principles. Ch.1, Intro	
2		9/3	Ch.2, OLS	Labor day 9/1
3	9/8	9/10	Ch.2, OLS, Ch.3, Learning to use Regressions	
4	9/15	9/17	Stata introduction[a], Ch.4, The classical model	
5	9/22	9/24	Ch.4, The classical model	
6	9/29	10/1	Ch.4, The classical model, Ch.5, Hypothesis testing	
7	10/6	10/8	Ch.5, Hypothesis testing	
8				
9	10/20	10/22	Ch.6,7 Specification issues	
10	10/27	10/29	Ch.6,7 Specification issues	
11	11/3	11/5	Experimental methods in economics[a]	
12	11/10	11/12	Ch.8, Multicollinearity, Ch.9, Serial Correlation	
13	11/17	11/19	Ch.9, Serial Correlation, Ch.10, Heteroskedasticity	
14	11/24	11/26	Ch.13, Dummy Dependent Variables	
15	12/1	12/3	Ch.12, Time-Series	
16	12/8	12/10	Review	

[a] Supplementary material will be distributed for these lectures.