ECON 594: Applied Economics

Instructor: Thomas Lemieux (Iona 201A)

Spring / Summer 2019

Objective

The objective of this course is to provide you with a number of tools for conducting empirical research in economics, and to use these tools for a major research paper to be submitted at the end of the course. The focus of the course will be on empirical methods for cross-sectional and panel data. You are encouraged to choose a research topic in which you will have the opportunity to apply in practice the methods learned in class. While these methods are typically used in applied microeconomics (labour economics, public economics, economic development, industrial organization, international trade, etc.), students are free to choose the topic of their research paper provided that it involves an empirical contribution.

Evaluation

Exam: 30%
Class presentation: 20%
Empirical paper: 50%

Important dates

Lectures: There will be ten two-hour lectures during the month of May, starting on Monday May 6th. The lectures will take place from 10am to 12 noon in room Iona 633. A detailed schedule is provided below.

Exam: The (two hours) exam will be on Friday, May 31st.

Student presentations: Students will present a preliminary version of their project in the weeks of June 3-7 and June 10-14 (and perhaps June 17/18 if needed).

Final paper submission: The deadline for submission of the final version of the paper is Friday August 2nd.

Other information

A detailed description of the paper project is available on my website (teaching tab).
Office hours

My office hours are on Monday and Wednesday from 2 pm to 4 pm throughout the semester (May, June and July). For quick questions you can also send me an email at thomas.lemieux@ubc.ca.

Teaching Assistant

Davide Alonzo is the TA for the class. His office hours are 10am-12noon on Friday in Iona 434.

Reading list

The lectures will cover a variety of material from books and articles. A set of lecture notes will be made available on my website (teaching tab) prior to each lecture. Most of the themes covered in class are discussed in more detail in the following book by Jeff Wooldridge:


More standard econometric texts such as Greene are also a useful reference:


You may also find the “Mostly Harmless Econometrics” book by Angrist and Pischke interesting and useful:


Machine learning methods are becoming popular in economics but haven’t made their way through standard textbooks yet. Useful references (for lecture 7) include:


As well as the Econ 628 notes of our very own Paul Schrimpf at:

http://faculty.arts.ubc.ca/pschrimpf/628/machineLearningAndCausalInference.html
Class schedule

Lectures will be held from 10 am to 12 noon in Iona 633 on different days depending on the week:

Lecture 1, Monday May 6: Introduction, heteroskedasticity and clustering

Lecture 2, Tuesday May 7: IV and Two-Stage least squares

Lecture 3, Wednesday May 8: Panel data 1

Lecture 4, Monday May 13: Panel data 2

Lecture 5, Tuesday May 14: Discrete choice models 1

Lecture 6, Wednesday May 15: Discrete choice models 2

Lecture 7, Tuesday May 21: Machine learning in economics

Lecture 8, Wednesday May 22: Measurement error

Lecture 9, Monday May 27: Distributional methods

Lecture 10, Tuesday May 28: Regression discontinuity

Exam: Friday, May 31.

Student presentations: Weeks of June 3-7 and June 10-14 (and perhaps June 17 and 18).

Deadline for final paper submission: Friday, August 2.