

ECON 742: Empirical Microeconomics

Instructor: Saraswata Chaudhuri

Email: saraswata.chaudhuri@mcgill.ca

Office Hours: Thursday 3:00-4:00 or by appointment

Lecture Time: Thursday, 11:35-2:25

Location: LEA 517

Description:

ECON 742 is a course on methods that are commonly used in various fields of Economics such as Labor, Development, Growth, Health, Industrial Organization, etc. In other words, the course is about Applied Microeconometrics. The methods to be discussed in this class can in general be applied to cases where you have observations for a single period or multiple periods on a large number of units (individuals, firms, countries, etc.). We will focus mainly on the methods, i.e., what is the method, why it works, how it works. The discussions will be superficial (i.e., no proofs) in some sense because the primary purpose of this course is to get you familiar with a variety of methods. We will use some relatively well known datasets for applications of these methods.

What we will not discuss are the following: (1) the theoretical foundation for all these methods, because it is not relevant for the target students; (2) novel applications, because you can learn it better from other field-specific courses.

Prerequisite:

ECON 662D1 or permission of instructor. Familiarity with Stata will be very helpful.

Grading Policy:

The best way to learn methods is to apply them. So this course will be assignment intensive. Assignments are posted below. They are due exactly one week after the concerned topic is covered in the lecture. Feel free to work as a group for these assignments but turn in your own answers.

At the same time, I would expect all the students to write a paper on any topic of their choice. In this paper you would apply the methods learnt in this class to real life data. I would expect you to come up with a research question of your choice, think of an appropriate dataset, and then apply these methods. You can expect my help with the last part.

Your grades will be based on the weekly assignments and the paper. 30% of the final grade will be based on the assignments, 70% on the paper.

Textbook:

“Microeconometrics” by Colin Cameron and Pravin Trivedi. I strongly recommend that you solve all the exercises in this book. Your homework assignments are based on these exercise. Online resources for the book are available from the website <http://cameron.econ.ucdavis.edu/mmabook/mma.html>.

“Microeconometrics Using STATA” by Colin Cameron and Pravin Trivedi is a useful supplement for this book.

“Econometric Analysis of Cross Section and Panel Data” by Jeffrey Wooldridge is also an excellent reference. In addition, you will find the [lecture notes](#) by Guido Imbens and Jeffrey Wooldridge from their popular lecture series “What is New in Econometrics” very useful.

Course Outline:

Week	Chapter: Topic	Assignments from the Text
1: Jan 12	Ch 14: Binary Outcome Models	14-3, 14-4, 14-5, 14-6
2: Jan 19	Ch 15: Multinomial Models	15-2, 15-3, 15-4
3: Jan 26	Ch 16: Tobit & Selection Models	16-2, 16-3, 16-5
4: Feb 2	Ch 21: Linear Panel Models: Basics	21-3, 21-4
5: Feb 9	Ch 22: Linear Panel Models: Extensions	22-2, 22-5
6: Feb 16	Presentations: Proposal for the project (turn in proposal)	
7: Feb 23	Ch 23: Nonlinear Panel Models Ch 20: Models of Count Data	23-2, 23-3 20-4, 20-6

8: Mar 9	Ch 17: Transition Data: Survival Analysis Ch 19: Models of Multiple Hazards	17-2, 17-3 19-3, 19-4
9: Mar 16	Possibly reschedule	
10: Mar 23	Ch 18: Mixture Models & Unobserved Heterogeneity	18-3, 18-4
11: Mar 30	Ch 24: Stratified and Clustered Samples Ch 26: Measurement Error Models Ch 27: Missing Data & Imputation	24-2, 24-4 26-4 27-2
12: Apr 6	Ch 25: Treatment Evaluation	25-5

Apr 13: Deadline for submitting your project report.