ECON 7520: Empirical Industrial Organization
Fall 2015
M 6-8:30pm
Room: Uris 494

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This course is a graduate level introduction to empirical industrial organization, both in terms of techniques and applications. The emphasis is heavily weighted toward recent, cutting-edge research papers. Our aim is to provide the tools necessary to write a solid dissertation in empirical industrial organization, and our hope is that the techniques in this class will be useful to students from other fields as well.

The course has some difficult econometrics, and it is expected that students have a basic comfort level with estimation. It is also expected that students will do requisite background reading in econometric theory where necessary. There is no primary textbook for this class. We will be using a combination of lecture notes and journal articles. All of the articles below are easily accessible from the web.

The course will be graded on class-participation and seminar attendance (20%), assignments (30%), quizzes and midterms (50%). There will be two in-class midterms and some random short quizzes. I will send out a weekly announcement on papers to be discussed in class in the following week. You should read these papers ahead of time and answer questions in class. The home assignments consist of: A) estimating a BLP model using the same auto data that Berry, Levin, and Pakes used in their 1995 Econometrica paper (due on Friday Oct 9th); B) a 5-page research proposal (due on Friday Oct 30th); and C) estimating a dynamic model (due on Monday Nov 30th). MATLAB proficiency is necessary (but not sufficient) for assignments A and C. You are encouraged to work together as a group on these two assignments (write down the name of students in your group on your report), but you should work independently for assignment B. The research proposal is intended to help you get started with your second-year paper, which will hopefully become part of your thesis.

There will be seven IO seminars this semester:

- September 16th Panle Jia Barwick
- September 30th Chris Conlon (joint with Metrics and Public Finance)
- October 7th JF Houde (joint with Metrics and Public Finance)
- October 14th Nate Hendren (joint with Public Finance)
- October 21st Debi Mohapatra
- November 4th Gautam Gowrisankaran (joint with Environment)
- November 16th Aloysius Siow (joint with Labor)
Attendance is mandatory. You are required to select a seminar paper in advance and present a brief summary in class (20 minutes) in the week the paper is presented. Two of you will work together to present one paper. Note that Siow’s talk will be on the noon of Monday Nov 16th. If his paper is available in advance, one of you can present his paper on Nov 9th. Otherwise, you can present your own research or a paper that is chosen by me.

I have invited several visiting professors this fall. Chris Conlon from Columbia will visit us from Sep 28th to Oct 2nd. JF Houde from Wharton will visit us from Sep 29th to Oct 9th. Steve Berry from Yale will visit us from Oct 22nd to Oct 24th. I encourage all of you to meet with them.

In addition, Steve will deliver a 4-hr master class on ‘empirical models of differentiated products’ on Thur Oct 22nd from 1 to 5:15pm. This is a rare opportunity (we are lucky to have him) and please make every effort to attend this master class.

The course website is at: https://piazza.com/cornell/fall2015/econ7520/home. Please sign up with piazza.com if you have not done so. Piazza.com has a great message board. Please use it (instead of emails) to post questions. Also feel free to answer them if you know the answer! I will monitor it frequently and try my best to answer questions in a timely manner.

We will meet on Monday evening from 6pm to 8:30pm, except for September 7th (Cornell holiday), September 21st (I am away), and Oct 12th (Fall break). We will have a make-up class on Wednesday, September 30th (6-8:30pm). Please let me know if you have a schedule conflict for September 30th.
Reading List

1 Demand

Required Readings


Additional Readings (alphabetical order)


• Dan Akerberg (2003), “Advertising, Learning and Consumer Choice in Experience Good Markets: A Structural Empirical Examination,” *International Economic Review*, Vol 44 (3). (This paper is one of the most under-appreciated papers and should have appeared in a much better journal)


• Aviv Nevo (2000), “A Practitioner’s Guide to Estimation of Random Coefficients Logit Models of Demand,” Journal of Economics & Management Strategy, 9(4), 513-548. Nevo’s website also posts the related MATLAB code. Note: there is a (famous) minor error in the calculation of the Jacobian matrix that has been widely recognized. It is possible that the current code posted on Nevo’s website has already been corrected.


Methodological Readings: SMM


2 Entry and Static Games

Required Readings


Additional Readings


• Katherine Ho: “Insurer-Provider Networks in the Medical Care Market”, AER 2008.


Methodological Readings


## 3 Dynamic Models

Required Readings


Methodological Readings


Additional References


• Thierry Magnac and David Thesmar, “Identifying Dynamic Discrete Decision Processes,” Econometrica, 70(2), pp 801-816


4 Merger and Competition Policy

Required Readings

• “2010 United States Horizontal Merger Guidelines”

• “Antitrust Evaluation of Horizontal Mergers” by Joseph Farrell and Carl Shapiro

5 Advertising, Matching, Auctions, and Other Random Topics