Econ 213B. General Equilibrium and Game Theory (a.k.a. Market Design)

Monday and Wednesday, 2:25-3:40pm, Bunche Hall 9383

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Office hours: I intend to be available to talk to after every class; we can also coordinate on additional meetings. Class Website: <u>https://moodle2.sscnet.ucla.edu/course/view/15W-ECON213B-1</u>

Econ 213B is an elective PhD course, part of the microtheory field requirement. We will discuss several topics in market design, matching, and search. The course will give you a sense of this rich area, but it will not be a complete survey. We will focus instead on selected parts of the current research frontier. The tentative list of topics and papers we will cover is below. Most of the papers are google-searchable via authors, or authors/ journal/year, or authors/title. I expect to keep updating this list based on our discussions throughout the quarter.

Auctions

Divisible Goods

- Pycia and Woodward 2014
- Woodward 2014

Heterogenous Goods

- Ausubel AER 2006
- Sun and Yang, JPE forthcoming

Optimal Auction Design

- Bulow and Roberts JPE 1989
- Ausubel and Cramton "The Optimality of Being Efficient" 1999

Efficient Mechanisms

- Pycia "The Cost of Ordinality" 2011
- Garratt and Pycia, Efficient Bilateral Trade, 2014
- Hatfield, Kojima and Kominers "Strategy-Proofness, Investment Efficiency, and Marginal Returns: An Equivalence" 2015
- Mylovanov and Trogger (Informed Principal)

Matching

Background

- Gale and Shapley AMM 1962
- Becker JPE 1973
- Roth
- Hatfield and Milgrom AER 2005

Externalities in Matching

- Dutta, Ehlers, and Kar, JET 2010
- Pycia and Yenmez, Matching with Externalities, 2013
- Fisher and Hafalir, Matchings with Aggregate Externalities, 2014

Information in Matching

- Liu, Mailath, Postelwaite, and Samuelson ECMA 2014
- Bikchandani 2014
- Pomatto 2014
- Echenique and Pycia 2011

Aggregate Implications of Matching

- Geerolf, A Theory of Power Law Distributions, 2014
- Lleras-Muney and Pycia 2014

Search

Assortative Search

- Shimer and Smith ECMA 2000
- Eeckhout and Kircher

Information in Search

- Guerrieri, Shimer, and Wright ECMA 2010
- Guerrieri and Shimer AER (forthcoming)
- Menzio 2010
- Kim and Kircher, Efficient Competition through Cheap Talk, 2013
- Mirkin and Pycia

Applied Market Design

• Roth JPE 1984 (medical match), Abdulkadiroglu and Sonmez AER 2003 (school choice), and possibly other topics such as the design of electricity markets, traffic systems, etc

My aim is to make the class research oriented: we will talk about research ideas in class. In particular, I intend to go through papers in a selective fashion trying to understand what is in a paper, where it comes from, and where it might lead. While there will be lecture elements, we will also spent time jointly looking at questions. The upside of this approach is that it replicates to some extent the experience of doing research. The downside is that a polished and structured exposition is not the primary goal of the class. Of course, if you go to the papers we will discuss, you would find there a polished and structured exposition.

The course grade will be based on class participation, and on a written sketch/proposal/note/paper on a research topic of your choice.