Market Design Syllabus

This class will cover the theory of matching markets with an emphasis on their application to real world problems. There will be some lectures on the basic theory and classical results, but we will try to focus on newer material and open questions arising from applications.

Lectures are MW: 11-12:50 in Econ 106. Course materials will be posted on the website: http://www.stanford.edu/~niederle/marketdesign

The requirements for the course are to write a research paper. The paper is due at the end of the quarter, with no exceptions.

There is one book that we recommend for background reading.


The schedule for lectures is as follows. The schedule is still tentative, as I try to schedule 4 outside speakers. But the order of the lectures will roughly be as follows.

1, 2 Sept 26 and 28: Introduction and Theory


3 Oct 3: NRMP design: Large Markets


4 Oct 5: Congestion in Matching Markets

5, 6 Oct 10 & 12: Unraveling and decentralized matching:

7 Oct 17: Matching with wages

8 Oct 19: Housing Market

9 Oct 24: Kidney Exchange
10 - 11 Oct 26 & 31: School Choice


12 Nov 2: School Choice


13 Nov 7: Signaling:

• Avery, Christopher and Jonathan Levin, "Early Admissions at Selective Colleges," American Economic Review.

14 Nov 9 Decentralized Markets

15, 16 Nov 14 and 16: Random Assignment Mechanisms:
• Yilmaz, O., “House Allocation with Existing Tenants: A New Solution,” mimeo
• Manea, Mihai, “Asymptotic Ordinal Inefficiency of Random Serial Dictatorship”, Theoretical Economics.

17 Nov 28
18 Nov 30
19, 20 Dec 5, 7

Guest lectures
1. Clayton Featherstone
2. Matt Elliott
3. Fuhito?
4. John H?
5. Jacob Leshno or / and Eduardo Azevedo?
6. Eric Budish?