



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DISEI
DIPARTIMENTO DI
SCIENZE PER L'ECONOMIA
E L'IMPRESA

Friday 25 October 2019

3rd International Week
Department of Economics and Management
University of Florence

Mini Course on Two-sided matching: theory and application to school choice

PhD in Economics
And

Health and Education Economics - MSc in Economics and Development

Professor Vincent Iehlé

CREAM, Université de Rouen Normandie

Ass. Researcher, Centre d'Economie de la Sorbonne

Room: D6/011

Time:

10.15-11.45

12.00-13.30

14.30-16.00

Title: Two-sided matching: theory and application to school choice

Instructor: Vincent IEHLE

Objectives: this is a topics course in microeconomics. It covers recent developments on the allocation of resources on markets not necessarily governed by prices, with an emphasis on the allocation of public-school places to children.

Course Description:

1. Introduction to two-sided matching

- Gale and Shapley (1962) College admissions and the stability of marriage, *American Mathematical Monthly*.
- Roth (1982) The economics of matching: stability and incentives, *Mathematics of Operations Research*.
- Dubins and Freedman (1981) Machiavelli and the Gale-Shapley algorithm, *American Mathematical Monthly*.
- Roth (1984) The evolution of the labor market for medical interns and residents: A case study in game theory, *Journal of Political Economy*.

2. School choice

- Abdulkadirogolu and Sonmez (2003) School choice: a mechanism design approach *American Economic Review*.
- Pathak and Sonmez (2013) School Admissions Reform in Chicago and England: Comparing Mechanisms by their Vulnerability to Manipulation, *American Economic Review*.
- Hafalir, Yenmez and M. Yildirim (2013) Effective Affirmative Action in School Choice, *Theoretical Economics*.

3. Putting theory into practice

- Admission to secondary schools
- Admission to college / universities
- Academic job market
- Teachers' assignments

Texts Used:

- **Roth, A. and M. Sotomayor:** *Two-sided matching - A study in game-theoretic modeling and analysis*. Cambridge University Press. 1990.
- **Roth, A.** (2008), Deferred acceptance algorithms : history, theory, practice, and open questions, *International Journal of Game Theory* 36(3), 537-569.
- **Sonmez, T. and U. Unver:** *Matching, allocation, and exchange of discrete resources*. Chapter 17 in *Handbook of Social Economics* (volume 1). North-Holland. 2010