31C01000 Economics of Strategy for Online and Digital Markets

Topics in Economic Theory and Policy

PART I

Lecture 1 INTRODUCTION

- Why economics: Preferences and efficiency
- Practicalities of the course

Lecture 2 PREREQUISITIES (RECAP)

• Preferences (CORE 3.2-3.5), basics of game theory (4.1-4.3), Pareto efficiency (CORE 5.2)

Lecture 3 MARKETS

- Institutions, supply and demand (CORE 8.1, 8.2), competitive equilibrium (CORE 8.5)
- Perfect competition (CORE 8.8), monopoly, oligopoly

Lecture 4 AUCTIONS

- Motivation: price discovery, competition
- Auction types

Lecture 5 GUEST LECTURE: ECONOMICS OF GAMES

Lecture 6 MARKET DESIGN

• Setting the right incentives, finding preferences, implementation

Lecture 7 ONLINE MARKETS

• Recipe for success: reduce frictions, use data, build trust

PART II

Lecture 8 NETWORKS

• Complementarity (CORE 21.1-21.3), network effects (CORE 21.4)

Lecture 9 PLATFORMS

- Two sided markets (CORE 21.5)
- How platform grow (and shrink)

Lecture 10 STRATEGIES OF PLATFORMS

- Design, governance
- Openness, pricing

Lecture 11 SHARING ECONOMY

- Peer-to-peer markets
- Trust, reputation

Lecture 12 REGULATION AND POLICY

- Digital rights, market power, discrimination
- Externalities

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Reading materials

GENERAL

Any microeconomics textbook should be helpful throughout the course; for example, Hal Varian, "Intermediate Microeconomics: A Modern Approach" (Eighth Edition or higher), is not a bad choice. Purchase of such book for this course is not mandatory; the material listed here and given at the lectures is more than sufficient as well.

The numbering above in the schedule refers to free ebook "The Economy" by the CORE initiative, which makes a good read otherwise as well, see https://www.core-econ.org.

INTRODUCTION

Athey, S. and M. Luca (2018) Economists (and Economics) in Tech Companies.

AUCTIONS

Milgrom, P. (1989) "Auctions and Bidding: A Primer", Journal of Economic Perspectives.

Reiley, D. (2000) "Auctions on the Internet: What's Being Auctioned, and How?", Journal of Industrial Economics.

Ockenfels, A., Reiley, D. and Sadrieh, A. (2006) "Online auctions", NBER Working Paper 12785.

MARKET DESIGN

Varian, H. (2012) "Revealed Preferences and its Applications", Economic Journal.

ONLINE MARKETS

Milgrom, P. and S. Tadelis (2018) "How artificial intelligence and machine learning can impact market design", NBER Working Paper 24282.

NETWORKS

Katz, M. and C. Shapiro (1994) "Systems Competition and Network Effects", Journal of Economic Perspectives.

PLATFORMS

Evans, D. and R. Schmalensee (2007) "The Industrial Organization of Markets with Two-Sided Platforms", Competition Policy International.

Rysman, M. (2009) "The Economics of Two-Sided Markets", Journal of Economic Perspectives.

SHARING ECONOMY

Luca, M. (2016) "Designing Online Marketplaces: Trust and Reputation Mechanisms", Harvard Business School, Working Paper 17-017.

REGULATION AND POLICY

Demange, G. (2018) "Mechanisms in a Digitalized World", CESifo Working papers.