



Syllabus

Applied Microeconomics

GPEFM 2007/2008, Universitat Pompeu Fabra

Teacher

Jens Josephson

E-mail: jens.josephson@upf.edu

Telephone: 93 542 22 68

Office: 20.1E44

Office hours: Thursdays, 10.40-11.40

Teaching Assistant

Piya Sereevinyayut

E-mail: piya.sereevinyayut@upf.edu

Office: 20.159

Course Web

<http://www.econ.upf.es/~jens/applied/home.htm>

Outline

This is a course in microeconomic analysis with a managerial perspective. The objective of the course is to provide the students with a number of microeconomic tools for analysis and show how they can be applied to real-world problems. The course requires a basic knowledge of calculus and it is intended to cover the following areas:

1. **Consumer theory:** Preferences, indifference curves, utility maximization, demand functions, inverse demand functions, elasticity, aggregate demand, marginal revenue
2. **Producer theory:** Technology, production functions, isoquants, cost minimization, cost functions, returns to scale, long and short-run costs, durable assets, know how
3. **Pricing with market power:** Profit maximization, markup pricing, double marginalization, resale-price maintenance, franchising
4. **Price discrimination and bundling:** First-degree, second-degree, third-degree price discrimination, and product bundling
5. **Competitive markets:** Short-run and long-run firm and aggregate supply, short-run and long-run equilibrium
6. **Welfare analysis:** Consumer and producer surplus, taxes, subsidies, price regulation, monopoly, welfare and equity
7. **Risk aversion and expected utility theory:** Uncertainty, risk aversion, expected utility theory, paradoxes, using expected utility as a normative decision aid, risk sharing and diversification
8. **Game theory:** Strategic form games, extensive form games, dominance, Nash equilibrium, subgame-perfect equilibrium, mixed strategies
9. **Oligopoly:** Bertrand competition, Cournot competition, collusion, the Folk theorem, entry deterrence, credibility, reputation, durable goods
10. **Optional: Asymmetric Information:** Adverse selection, signaling, screening, moral hazard, incentive contracts, auctions
11. **Optional: Network externalities**

Grading

The final grade for the course will be determined by the student's performance on weekly problem sets and case studies (10%), and a final exam (90%). Class participation may tip the grade upwards when the final score is just below the threshold for a higher grade.

Problem sets are posted on the course web and should be handed in the box outside 20.159 before Mon. 12.00, the week after they are posted.

Literature

- Van Zandt, T. P.: *Firms, Prices, and Markets*, unpublished manuscript.
- Chapters 1 and 3 of Tirole, J.: *The Theory of Industrial Organization*, The MIT Press, 1988.
- A good intermediate micro textbook such as (in order of preference):
 - Perloff, J. M., *Microeconomics*, third or fourth edition, Pearson Addison Wesley, 2004. Web: <http://www.aw-bc.com/perloff/>
 - Varian, H. R., *Intermediate Microeconomics: A Modern Approach*, sixth edition, W. W. Norton and Company, 2002. (Separate book with exercises)
 - Kreps, D., *Microeconomics for Managers*, W. W. Norton and Company, 2004. (There is also a student's companion to this textbook that you may find useful.) Web: <http://www.wwnorton.com/college/econ/kreps/welcome.htm>.
- Good reference books:
 - Gibbons, R., *A Primer in Game Theory*. Harvester Wheatsheaf, 1992.
 - Jehle, G. A., and Reny, P. H., *Advanced microeconomic Theory*, second (or third) edition, Addison Wesley, 2001.
 - Mas-Colell A., Winston, M. D., and Green J. R., *Microeconomic Theory*, Oxford University Press, 1995.
 - Watson, J., *Strategy. An Introduction to Game Theory*, Norton 2002.
 - Tirole, J.: *The Theory of Industrial Organization*, The MIT Press, 1988.
- Articles and cases available in the print shop.

Reading List

I will announce recommended readings during the course. A preliminary reading list with relevant chapters in Kreps, Perloff, Tirole, and Zandt indicated follows.

Area	Readings
Introduction	Kreps: 1-2, Perloff: 1-3, Zandt: 1 An economist takes tea with a management guru
Consumer theory	Kreps: 4, 5, Perloff 4-5, Zandt: 2
Producer theory	Kreps: 8-10, Perloff: 6-7, Zandt: 3, 8
Pricing with market power	Kreps: 3, 6, Perloff: 11, Zandt: 4, Tirole: 1
Price discrimination and bundling	Kreps: 7, Perloff: 12, Zandt: 5-6, Tirole: 3 Race and Gender Discrimination in Bargaining for a New Car They're watching you A bundle of trouble An ounce of prevention Indiscriminate pricing Will the Roxy Theater Maximize Profits by Eliminating Its Student Discount?
Competitive markets	Kreps: 11, Perloff: 8, Zandt: 7-8 Growth and Profitability: A Tale of Two Competitive Industries
Welfare analysis	Kreps: 12, Perloff: 9, Zandt: 7
Risk aversion and expected utility theory	Kreps: 15-17, Perloff: 17, Prospect theory: An analysis of decisions under risk
Game theory	Kreps: 21-22, Perloff: 13, Zandt: 9-10
Oligopoly	Kreps: 22-23, Perloff: 13-14, Zandt: 11-12 The GE/Honeywell Merger
Asymmetric Information	Kreps: 18-19, Perloff: 19-20, Zandt: 12
Network externalities	Zandt: 13 Baccara, M., Backus, D., Bar-Isaac, Heski, Cabral, Luís, and White, L.: "Betamax and VHS," NYU Stern School of Business 2004.