

API-101 (B)-(D)
Markets and Market Failure

Section B— George Borjas: Mondays and Wednesdays, 8:40-10:00, Wiener
Section C— Pınar Doğan: Mondays and Wednesdays, 8:40-10:00, L130
Section D— Daniel Hojman: Mondays and Wednesdays, 8:40-10:00, RG20

Review Sessions: (1) Jason Richwine Fridays, 10:10-11:30, L130
(2) Onur Mumcu Fridays, 11:40-1:00, L230
(3) Sameer Doshi Fridays, 2:40-4:00, L230

<u>Faculty Information:</u>	<u>Borjas</u>	<u>Doğan</u>	<u>Hojman</u>
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Office Hours:	Wednesday 1-2:30, and by appointment	Wednesday 2:30-5, and by appointment	Wednesday 1:15-2:45 or by appointment
Faculty Assistant:	Karen Armstrong 496-7388 Taubman 151	Robert Mitchell 495-8833 Littauer 209	Michael Johnson 495-9455 Littauer 211A

Course Head: George Borjas
Faculty Assistant Head: Karen Armstrong

Overview

This course applies microeconomic reasoning to public issues, policies and programs. It considers economic incentives and organizations; models of economic behavior; the operation of markets; the price system and how it works; the consequences of market failure and interventions in markets; and policy objectives and instruments. *All sections of API-101 cover a common set of core topics and the midterms and finals will be identical across all sections.*

Requirements

The formal course requirements are: completion of nine problem sets, a midterm examination, and a final examination. The midterm will count for 40 percent of the final grade and the final exam for 60 percent. Although the problem sets will not be graded, there will be a penalty for not turning them in on time (see below). The examinations will be “in-class”; books and notes cannot be consulted during examinations. Note that the midterm will be held on Wednesday, November 1 from 8:30 to 10:00 AM *for all sections*. The final exam will be held on Friday, December 15 from 9 AM to 12 noon *for all sections*. The final exam will be cumulative.

A problem set will typically be assigned (and due) every week (mostly on a Monday, sometimes on a Wednesday). Students are required to turn in their solutions to the problem sets. Although problem sets will not be graded in detail, they will be checked and corrected by the course assistants. If a particular problem set is not turned in on time, *two* points (i.e. out of a potential 100 points) will be taken off from the final score in the class. It will be *extremely* difficult to do well in the midterm and final exams unless the student is familiar with and can solve the types of problems that are assigned in the problem sets. Class participation is strongly encouraged, but will not be graded.

Small groups of students (no more than 4) are **STRONGLY** encouraged to work together on the problem sets. Problem solutions *must* be written independently by each of the students in the small group, and *must* indicate the name of the students in the group. Answer sheets will be distributed shortly after each problem set is turned in.

There are weekly review sessions conducted by 3 Teaching Fellows (TF). Though each TF will be sitting in on one of the sections, since we all cover the same material, you are welcome to attend any review session that you find works for you.

Readings

The textbook for this course is *Microeconomics*, Sixth Edition, by Robert S. Pindyck and Daniel L. Rubinfeld (Prentice-Hall, 2005), hereafter referred to as P&R. Be aware, however, that the course is only loosely linked to this book and you are encouraged to use others if this one does not meet your needs. The book is on reserve at the KSG library and can be purchased at the Coop.

Other standard textbooks cover similar material to that in the Pindyck and Rubinfeld text. Students are encouraged to peruse through other micro textbooks to see if the material is covered or explained in ways that is more to their liking (use the index to the book if you are looking for a particular concept). Some of these alternative textbooks (on reserve at the KSG Library) are:

- E. and J. Browning, *Microeconomic Theory and Applications* (Harper Collins).
- S. E. Landsburg, *Price Theory and Applications* (Dryden Press).
- E. Mansfield, *Microeconomics: Theory and Applications* (Norton).
- Nicholson, *Intermediate Microeconomics and Its Applications* (Dryden Press).
- P. Trivedi, *Applied Microeconomics for Public Policy Makers* (International Management Publishers).
- H. Varian, *Intermediate Microeconomics: A Modern Approach* (Norton).

Some books provide a more engaging description of the economic way of thinking. Students might wish to complement the textbook and classroom presentations by looking at this material. These books include:

- David Friedman, *Hidden Order: The Economics of Everyday Life* (Harper, 1996).
- Steven E. Landsburg, *The Armchair Economist: Economics & Everyday Life* (Free Press, 1993).
- Steven D. Levitt and Stephen J. Dubner, *Freakonomics* (Morrow, 2005).

COURSE OUTLINE AND READINGS

I. Introduction (Classes 1-4)

1. The basics of supply and demand. Market equilibrium.
P&R, Chapter 1; Chapter 2, pp. 19-32.
2. Determinants of supply and demand. Elasticities.
P&R, Chapter 2, pp. 32-54.
3. Supply and demand in action.
P&R, Chapter 2, pp. 55-57.
4. Policy application: Minimum wages and rent control
Recommended: Card, David and Alan B. Krueger. "Minimum Wages and Employment: A Case Study of the Fast Food Industry in New Jersey and Pennsylvania," *American Economic Review* 94, September 1994, pp. 772-793.
Recommended: Neumark, David and William Wascher. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania: Comment," *American Economic Review*, December 2000, pp. 1362-1396.

II. Theory of the Consumer (Classes 5-8)

5. Indifference curves; budget lines; optimality conditions.
P&R, Chapter 3, pp. 63-96.
6. The law of demand; income and substitution effects; market demand.
P&R, Chapter 4, pp. 107-141; students with a strong mathematical background are encouraged to also read pp. 145-152.
7. Policy applications: Vouchers versus subsidies
8. Policy applications: Taxes, lump sum transfers, kinked budget lines.

III. Theory of the Firm (Classes 9-11)

9. Production theory—Part 1.
P&R, Chapter 6; Chapter 7, pp. 213-242.
10. Production theory—Part 2; and applications.
P&R, Chapter 6; Chapter 7, pp. 203-242; students with a strong mathematical background are encouraged to read pp. 256-260.
11. Profit maximization and competitive supply
P&R, Chapter 8, pp. 261-294

IV. Competitive Equilibrium Reexamined (Classes 12-14)

12. Perfect competition and efficiency; consumer surplus and producer surplus
P&R, Chapter 9, pp. 299-310.

13. Price controls; price supports; production quotas; taxes
P&R, Chapter 9, pp. 310-332.

14. Policy applications, continued

15. **Midterm**

V. Market Failure: The Lack of Competition or Information (Classes 16-20)

16. Introduction to market failure. Monopoly.
P&R, Chapter 10, pp. 339-364, 372-377.

17. Remedies to monopoly: price discrimination and regulation.
P&R, Chapter 11, pp. 381-403.

18. Market failure in action. Applications of monopoly.

19. Oligopoly; basics of game theory.
P&R, Chapter 12, pp. 441-467. Students interested in game theory may also want to read Chapter 13, pp. 473-510.

20. Information and market failure. Signaling, moral hazard, adverse selection.
P&R, Chapter 17, pp. 613-632.
Akerlof, George, "The Market for Lemons: Qualitative Uncertainty and the Market Mechanism,"
Quarterly Journal of Economics 84 (1970), pp. 488-500.

VI. Market Failure: Externalities, Public Goods and Equity (Classes 21-25)

21. Externalities.
P&R, Chapter 18, pp. 641-665.

22. Externalities in action.

23. Public goods and the commons problem.
P&R, Chapter 18, pp. 665-671.

24. Public goods in action.

25. Review

API-101 Sections B, C, and D
Schedule of Lectures and Assignments

Class	Date	Topic of Discussion	Assignment due
1	Mon., Sept. 11	The basics of supply and demand. Market equilibrium	
2	Wed., Sept. 13	Determinants of supply & demand; elasticities	
3	Mon., Sept. 18	Price controls; minimum wages	Set 1
4	Wed., Sept. 20	Taxes, Subsidies	
5	Mon., Sept. 25	Indifference curves; budget lines; optimality conditions	Set 2
6	Wed., Sept. 27	The law of demand; market demand	
7	Mon., Oct. 2	Policy applications of theory of consumer	Set 3
8	Wed., Oct. 4	Policy applications of theory of consumer, continued	
	Mon., Oct. 9	No class- Columbus Day	
9	Wed., Oct. 11	Production theory—Part 1	Set 4
10	Mon., Oct. 16	Production theory—Part 2; applications	
11	Wed., Oct. 18	Profit maximization and competitive supply	Set 5
12	Mon., Oct. 23	Perfect competition and efficiency; consumer surplus and producer surplus	
13	Wed., Oct. 25	International trade	Set 6
14	Mon., Oct. 30	Taxes, subsidies, price controls revisited	
15	Wed., Nov. 1	MIDTERM EXAM for ALL sections, 8:30 – 10:00 am	
16	Mon., Nov. 6	Introduction to market failure: Monopoly	
17	Wed., Nov. 8	Remedies: Price discrimination and regulation	
18	Mon., Nov. 13	Market failure in action. Applications of monopoly and oligopoly.	Set 7
19	Wed., Nov. 15	Oligopoly; basics of game theory	
20	Mon., Nov. 20	Information and market failure. Signaling, moral hazard, adverse selection	Set 8
21	Wed., Nov. 22	API-101 DOES NOT MEET TODAY	
22	Mon. Nov. 27	Externalities	
23	Wed. Nov. 29	Applications of externalities; pollution control	
24	Mon., Dec. 4	Public goods and the commons problem.	Set 9
25	Wed., Dec. 6	Review	
	Fri., Dec. 15	FINAL EXAM FOR ALL API-101 SECTIONS, 9 AM – 12 noon	

Note: Problem sets will be handed out a week before and returned to the student a week after they are due.