

ECON 410-2: MICROECONOMICS (GENERAL EQUILIBRIUM)
Course Presentation and Outline

This course focuses on General Equilibrium—the study of interactions between the optimizing decisions of “small” firms and households. General Equilibrium theory provides a powerful and elegant conceptual framework for the normative and positive analysis of an entire economy, albeit at the cost of stringent assumptions about technology, preferences, and agents’ expectations.

LOGISTICS. Class: Tue, Thu 1:00p-2:50p on Zoom. Your TAs are Miguel Santana and Tomer Yehoshua-Sandak. We are going to have *two* TA sections. Everybody should attend the one on Friday, 3p-4:50p. In addition, if you feel you need extra help with the material, or have questions, you can also attend the “extra-help” section on Monday, 2-3:50p. (Both TA sessions will be on Zoom.) I will explain the details in class. [Note: there will only be one TA session for the first week of classes, on Friday, because Monday January 19 is MLK Day.]

My Office hours: by appointment. Email: marciano@northwestern.edu.

There is a Canvas Web site for this course. You should check it periodically for announcements, handouts, etc.

ASSIGNMENTS AND GRADING. There will be homeworks (20% of final grade), a midterm (35%) and, of course, a final exam (45%). You are welcome to work on problem sets in groups, and turn in a single write-up (but make sure to list the names of all group members).¹

READINGS. The official textbook is “Microeconomic Theory,” by A. Mas-Colell, M. Whinston, and J. Green (Oxford University Press, 1995), abbreviated “MGW”. We will cover Chapters 10 and 15-19 (?) of MGW. Gerard Debreu’s “Theory of Value” (Cowles Foundation Monograph #17, 1959) is a classic; best of all, you can get it for free (yay!) from the Cowles Foundation Web site (at <http://cowles.econ.yale.edu>). Finally, you may also wish to consult “Microeconomic Foundations I: Choice and Competitive Markets,” by David Kreps (Princeton University Press, 2012): it is “nonstandard” in many ways, but very insightful. Finally, Truman Bewley also has a textbook, which I think is also very rich in insight (although it does not cover all the topics we will in this course).

Please familiarize yourselves with the Canvas course site: it will serve as repository for lecture notes, problem sets, solutions, etc., as well as a general communications hub.

¹It would be good for you to hand in typed answers—this is a perfect time to learn how to use L^AT_EX!

TENTATIVE WEEKLY COURSE OUTLINE

NOTE: due to the fact that Reading Period is suspended for this term, I may have to reshuffle things in the second part of the course, so you don't have to take the final the day after the last class. Stay tuned for updates.

January 12. Prelude: Partial-Equilibrium analysis.

January 14: The Edgeworth Box: Pure Exchange

January 19. The GE Model: First and Second Welfare Theorem

January 21. "Computational" implications of the welfare theorems. Kuhn-Tucker characterization. Externalities and Lindhal equilibria. Second Welfare Theorem without convexity. Pareto optimality and social welfare functions. (Mention Core Equivalence)

January 26. Existence of Competitive Equilibrium.

January 28. Existence, Continued. The Sonnenschein-Mantel-Debreu theorem.

February 2: Non-cooperative foundations

February 4: Matching: Marriage and College-admission problems; the Gale-Shapley deferred-acceptance algorithm

February 9: Matching: Incentive properties in the marriage and college-admission problems. One-sided matching and top trading cycles

February 11: Matching: house allocation problem, kidney exchange. The Kelso-Crawford labor-market model

February 16: MIDTERM (Coverage: up to and including Feb. 11) [90mins within a 24-hour period]

February 18: Matching: Matching with Contracts. Hatfield - Milgrom...

February 23: Uncertainty, Contingent Commodities, and Arrow-Debreu Equilibrium

February 25: Sequential Trade and Radner equilibrium; begin Asset Markets

March 2: Asset Markets; Incomplete Markets (Hart)

March 4: Asymmetric Information and Rational Expectations (basics)

March 9: Rational Expectations

March 11: Topics in Rational Expectations; Eductive Reasoning [TBD]

Thursday March 12: Final Exam, 9:00a-11:00a. [120 mins within a 24-hour period]