

Preliminary --- Subject to Revision, 12/23/2016
ECONOMICS 200B – Part 1
MICROECONOMIC THEORY --- MARKETS AND
WELFARE

The principal text for the course is Starr, *General Equilibrium Theory: An Introduction*, 2nd edition. Let Ross know of typos or errors. In addition we will use Mas-Colell, Whinston, and Green, *Microeconomic Theory*, Varian, *Microeconomic Analysis*, 3rd edition, Kreps, *A Course in Microeconomic Theory*.

Items shown with a bullet (●) are required reading for Economics 200B. Items shown with an asterisk (*) on the syllabus were once designated by the UCSD Economics faculty as sufficient preparation for the qualifying examination in microeconomics for these topics. *-designated material overlaps and extends ●-designated material; suggestion: read both. Material denoted by a dagger (†) is intended to provide additional depth and breadth for the topic presented but is not intended to appear on a class or qualifying examination.

There will be weekly problem sets required.

I. The Robinson Crusoe model; the Edgeworth Box in Consumption and Factor allocation

●Starr, *General Equilibrium Theory: An Introduction*, Chapters 1 – 4.

*Mas-Colell, Whinston, and Green, chap. 15

*Varian, chap. 17

*Jones, R., "The Structure of Simple General Equilibrium Models," *Journal of Political Economy*, 1963, pp. 557 - 72.

†Nicholson, W., *Microeconomic Theory: Basic Principles and Extensions*, 2nd ed. chap 20, including appendices.

†Cornwall, R. R., *Introduction to the Use of General Equilibrium Analysis*, pp. 20-24, "Economists' View of Robinson Crusoe;" pp. 78 -83, "Partial versus General Equilibrium Analysis."

II. The Arrow-Debreu Model of Competitive Equilibrium - Definition and Existence

A. Existence of General Equilibrium in a simple model

●Starr, *General Equilibrium Theory: An Introduction* (second edition), Foreword, chap. 5

B. Refresher: Mathematics of Convexity, Fixed Points, and Correspondences

●Starr, *General Equilibrium Theory: An Introduction* (second edition), chaps. 8, 9, 23

C. Firms and attainable production

●Starr, *General Equilibrium Theory: An Introduction* (second edition), sections 15.1, 15.2, 24.1, 24.2.

D. Households

- Starr, *General Equilibrium Theory: An Introduction* (second edition), sections 16.1, 16.2, 24.3.

- E. Market Economy and Walras's Law

- Starr, *General Equilibrium Theory: An Introduction* (second edition), section 24.4.

- F. Existence of General Equilibrium

- Starr, *General Equilibrium Theory: An Introduction* (second edition), sections 24.5, 24.6

- Arrow-Hahn, chap. 7, appendix B.4.

- *Mas-Colell, Whinston, and Green, Appendix M.I, chap. 17

- *Varian, chap. 17, 18

- *Kreps, sections 6.1 - 6.4

- † Darrell Duffie and Hugo Sonnenschein "Arrow and General Equilibrium Theory" *Journal of Economic Literature*, Vol. 27, No. 2 (Jun., 1989), pp. 565-598.

- † Douglas Gale, "Bargaining and Competition Part I: Characterization" *Econometrica*, Vol. 54, No. 4. (Jul., 1986), pp. 785-806.

- †Malinvaud, E. *Lectures on Microeconomic Theory*, (1st ed., 1972) chap. 2, sections 1 - 8, chap. 3, sections 1 - 4; or same sections in the Revised edition (1985).

- †Cornwall, R. R., *Introduction to the Use of General Equilibrium Analysis*, pp. 1-42.

- †Russell, R. and M. Wilkinson, *Microeconomic Theory: A Synthesis of Modern and Neoclassical Microeconomic Theory*, chapters 15 and 16.

- †Arrow - Hahn, chapter 2.

- †Geanakoplos, J., "Arrow-Debreu Model of General Equilibrium," in Eatwell, Milgate, and Newman, *The New Palgrave: General Equilibrium* (1989).

- †Uzawa, H., "Walras' Existence Theorem and Brouwer's Fixed-Point Theorem," *Economic Studies Quarterly*, v. 8, 1962, pp. 59 -62.

- † Weintraub, E. R., " On the Existence of Competitive Equilibrium: 1930 - 1954," *Journal of Economic Literature*, XXI, March 1983, pp 1 - 39.

- † Weintraub, E. R., "Retrospectives: Lionel W. McKenzie and the Proof of the Existence of a Competitive Equilibrium," *Journal of Economic Perspectives*, v. 25, n. 2, pp. 199 – 215.

III. Efficiency of Competitive Equilibrium, Fundamental Theorems of Welfare Economics

- Starr, *General Equilibrium Theory: An Introduction* (second edition), section 8.1, chapter 19.

- *Mas-Colell, Whinston, and Green, Appendix M.G, chap. 16

- *Varian, chap. 17, 18

- †Cornwall, R. R., *Introduction to the Use of General Equilibrium Analysis*, chapter 4.

- †Arrow-Hahn, section 4-4

- †Debreu, *Theory of Value*, chapter 6.

- †Malinvaud, E. *Lectures on Microeconomic Theory*, (1st ed., 1972 or 2nd ed., 1985) chap. 4.

†Russell, R. and M. Wilkinson, *Microeconomic Theory: A Synthesis of Modern and Neoclassical Microeconomic Theory*, chapter 17.

†Koopmans, T. C., *Three Essays on the State of Economic Science*, essay I, part 2, "Competitive Equilibrium and Pareto Optimality."

IV. Core of a Market Economy

•Starr, *General Equilibrium Theory: An Introduction* (second edition), chaps. 21, 22 (omit section 22.4) .

*Mas-Colell, Whinston, and Green, chap. 18

*Varian, section 21.1

*Kreps, section 8.4

†Cornwall, R. R., *Introduction to the Use of General Equilibrium Analysis*, chap.5

†Debreu, G., and H. Scarf, "A Limit Theorem on the Core of an Economy," *International Economic Review*, v.4, (1963), pp. 235- 246.

†Anderson, R.M., "An elementary core equivalence theorem," *Econometrica*, v. 46, no. 6, (Nov. 1978), pp. 1483 - 1488.

†Ichiishi, T., *Game Theory for Economic Analysis*, sections 5.5, 5.6, and pp. 24, 25.

† Starr, sections 8.2, 22.4.

†Arrow-Hahn, chapter 8.

† Hildenbrand, W., "Cores," in Eatwell, Milgate, and Newman, *The New Palgrave: General Equilibrium* (1989).

† Foley, D. K. , "A Statistical Equilibrium Theory of Markets," *Journal of Economic Theory*, v. 62, 1994, pp. 321 - 345.

V. Social Welfare Functions and Social Choice Theory

•Varian, ch. 17

•Feldman, *Welfare Economics and Social Choice Theory* Ch. 9, 10

•Sen, Amartya K., *Collective Choice and Social Welfare*, chaps. 3, 3*

• Sen, Amartya K., "Social Choice Theory," chapter 22 in *Handbook of Mathematical Economics* , sections 1.1, 1.2, 1.3, 2.1.on the web, Arrow & Intriligator, eds. North Holland, 1986. Treatment in lecture will follow Sen's.

• Arrow & Scitovsky, *AEA Readings on Welfare Economics*, Arrow, "A Difficulty in the Concept of Social Welfare"

• Mas-Colell, Whinston & Green Ch. 21

*Mas-Colell, Whinston & Green 22A-C

† Chichilnisky, G. and G. Heal, "Necessary and Sufficient Conditions for a Resolution of the Social Choice Paradox," *Journal of Economic Theory*, v. 31, n. 1, October 1983, pp. 68 - 87.

VI. Time and Uncertainty -- futures markets

•Starr, *General Equilibrium Theory: An Introduction*(second edition), chap. 20.

•Debreu, G., *Theory of Value*, chapters 2, 7.

*Mas-Colell, Whinston, and Green, chap. 19

*Varian, chap. 19

†Arrow, K.J., "The Role of Securities in the Optimal Allocation of Risk-Bearing," *Review of Economic Studies*, v. 31, pp. 91 -96. Reprinted in Arrow, *Essays in the Theory of Risk-Bearing* .

†Radner, R., "Uncertainty and General Equilibrium," in Eatwell, Milgate, and Newman, *The New Palgrave: General Equilibrium* (1989).

†Geanakoplos, J., "An Introduction to General Equilibrium with Incomplete Asset Markets," *Journal of Mathematical Economics*, v.19, 1990, pp. 1 -38.

† Hahn, F. H., "Equilibrium with Transaction Costs," *Econometrica*, v. 39, 1971, pp. 417 - 439.

VII. A quasi-linear model; Externalities and Public Goods

A. Model

- *Mas-Colell, Whinston, and Green, chap. 10. Appendix M.E
- *Varian, chaps. 10, 13
- *Kreps, sections 8.1 - 8.3
- Feldman, *Welfare Economics and Social Choice Theory* Ch. 7
- *Starrett, *Foundations of Public Economics*, chap. 14

B. Externalities

- Laffont Ch. 1, secs. 1.1-1.5
- *Varian Ch. 24
- *Mas-Colell, Whinston & Green Ch. 11
- † Ruff, L., "The Economic Common Sense of Pollution," *The Public Interest*, No. 19, Spring 1970, pp. 69-85.
- † Coase, R.N., "The Problem of Social Cost," *Journal of Law and Economics*, 1960, 1-44.
- † Cornwall, R. R., *Introduction to the Use of General Equilibrium Analysis*, chap. 6
- † Hardin, G., "The Tragedy of the Commons," *Science*, 162 (1968), pp. 1243-1248.
- † Montgomery, David (1972), "Markets in Licenses and Efficient Pollution Control Programs," *Journal of Economic Theory*, 5, 395-418.

C. Public Goods

- Laffont Ch. 2, secs. 2.1-2.4; Ch. 3, secs. 3.1-3.3
- *Feldman *Welfare Economics and Social Choice Theory* Ch. 6
- *Varian Ch. 23
- *Mas-Colell, Whinston & Green Ch. 11
- † R. Russell and M. Wilkinson, *Microeconomics: A Synthesis of Modern and Neoclassical Theory*, chapter 18.
- † Starrett, D.A., *Foundations of Public Economics*, section 16.3

Appendix: * material (on economic equilibrium and welfare economics) not included in this course

Partial Equilibrium, Comparative Statics

- *Mas-Colell, Whinston, and Green, section 10.C. Appendix M.E
- *Varian, sections 13.1 – 13.5, 13.8, 13.11, 13.12
- *Kreps, sections 8.1 - 8.3