

Preliminary --- Subject to Change
ECONOMICS 200B Part 1 --- MICROECONOMIC THEORY
MARKETS AND WELFARE

A 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*, Arrow and Scitovsky, *AEA Readings on Welfare Economics*, Laffont, *Fundamentals of Public Economics*, and additional readings.

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. There will be a midterm exam on the material of the first five weeks of the course.

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

•Starr, *General Equilibrium Theory: An Introduction* (second edition) , Foreword, Chapters 1 – 4.

• Solow, Robert M., “A Contribution to the Theory of Economic Growth,” *Quarterly Journal of Economics*, 1956, v.70, section I “Introduction,” pp. 65, 66.

• "Ockham's razor." *Encyclopædia Britannica*. 2007. Encyclopædia Britannica Online. <<http://search.eb.com/eb/article-9056716>>.

*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."

†Arrow, K. J., and F. H. Hahn, *General Competitive Analysis*, chap 1.

†Arrow, K.J., "General Economic Equilibrium: Purpose, Analytic Techniques, Collective Choice," *American Economic Review* , LXIV, v. 3, June 1974, pp. 253 - 272.

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

A. Refresher: Mathematics of Convexity, Fixed Points, and Correspondences
•Starr, *General Equilibrium Theory: An Introduction* (second edition), chaps. 8, 9, 5, 23

B. Firms and attainable production
•Starr, *General Equilibrium Theory: An Introduction* (second edition), sections 15.1, 15.2, 24.1, 24.2.

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

D. Market Economy and Walras's Law
•Starr, *General Equilibrium Theory: An Introduction* (second edition), section 24.4.

• 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), chapters 8, 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. 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.

V. Core of a Market Economy

- Starr, *General Equilibrium Theory: An Introduction* (second edition), chaps. 21, 22, section 8.2 .
- Ichiishi, T., *Game Theory for Economic Analysis*, sections 5.5, 5.6, and pp. 24, 25.
- *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.
- †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.

VI . A quasi-linear model: Consumer Surplus and Compensation Tests

- *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

VII. 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.

VIII. Public Goods

- Laffont Ch. 2, secs. 2.1-2.4; Ch. 3, secs. 3.1-3.3
- *Feldman 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

IX. Why do we bother with general equilibrium theory and welfare economics?

A. The marginal cost pricing controversy

- † Harold Hotelling "The General Welfare in Relation to Problems of Taxation and of Railway and Utility Rates," *Econometrica*, Vol. 6, No. 3 (Jul., 1938), pp. 242-269
- †Harold Hotelling, "The Relation of Prices to Marginal Costs in an Optimum System," *Econometrica*, Vol. 7, No. 2 (Apr., 1939), pp. 151-155
- †Harold Hotelling , "A Final Note," *Econometrica*, Vol. 7, No. 2 (Apr., 1939), pp. 158-160
- †R. Coase, "The marginal cost controversy," *Economica*, v. 13, (1946), pp. 169 – 189.
- †W. A. Lewis, "The two-part tariff" and "The two-part tariff: A reply," *Econometrica*, v. 7, (1941), pp. 249 - 270 and pp. 399 – 408.
- †N. Ruggles, "Recent developments in the theory of marginal cost pricing," *Review of Economic Studies*, v. 17 (1949 – 1950), pp. 107 – 126

B. Method

- Starr, *General Equilibrium Theory: An Introduction* (second edition), chap. 27

- Fusfeld, D. R., "Methodenstreit," in *The New Palgrave*, Eatwell, Milgate and Newman, eds., Macmillan, 1987.
- Barkai, Haim, "The Methodenstreit and the emergence of mathematical economics," *Eastern Economic Journal*, Winter 1996
- McCloskey, D., "The Futility of Blackboard Economics," chap 3 in McCloskey, *The Vices of Economists---The Virtues of the Bourgeoisie*, Amsterdam University Press, 1996.
- Gibbard, A. and H. Varian, "Economic Models," *Journal of Philosophy*, v.75, 1978, pp. 664-677.
- † Hahn, F.H., *On the Notion of Equilibrium in Economics*.
- † Kaldor, N., "The Irrelevance of Equilibrium Economics," *Economic Journal*, (1972).
- † Debreu, G., "Theoretic Models: Mathematical Form and Economic Content," *Econometrica*, v.54, no. 6 (Nov. 1986), pp. 1259-1270.
- † Koopmans, T.C., *Three Essays on the State of Economic Science*; essays II and III, "The Construction of Economic Knowledge" and "The Interaction of Tools and Problems in Economics."
- † McKenzie, L.W., "General Equilibrium," *The New Palgrave*.
- † Clower, R. W., "Axiomatics in Economics," *Southern Economic Journal*, v. 62, 1995, pp. 307-319.

The following additional readings were once designated by the UCSD microeconomic theory faculty as part of suitable coverage for a qualifying examination in microeconomic theory:

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

Social Welfare Functions, Second Best Welfare and Social Choice Theory

- *Mas-Colell, Whinston & Green 22A-C
- * ? Mas-Colell, Whinston & Green 21 (Ross doesn't see this chapter on his list of qualifying exam reading but he thinks it probably was there.)