Economics 200B Prof. Ross M. Starr

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

A principal text for the course is Starr, *General Equilibrium Theory: An Introduction*, the second edition on the course website. 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*, Feldman, *Welfare Economics and Social Choice Theory* 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 take-home midterm and take-home final exam.

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

- ulletStarr, General Equilibrium Theory: An Introduction (draft second edition), Foreword, Chapters 1-5.
- Starr, "Kenneth J. Arrow (born 1921)" biography for the New Palgrave, 2nd edition, on the course website.
- 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." <u>Encyclopædia Britannica</u>. 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.
- †Weintraub, E. R., "On the Existence of Competitive Equilibrium: 1930 1954," *Journal of Economic Literature*, XXI, March 1983, pp 1 39.

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

II. 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

III. 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 Ch. 7
- *Starrett, Foundations of Public Economics, chap. 14

IV. 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.

V. Public Goods

- Laffont Ch. 2, sees. 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

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

- •Starr, General Equilibrium Theory: An Introduction (second edition), chaps. 8 18, 25.
 - 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

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- † 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.

VII. 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."

VIII. 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.

IX. 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.

X. Social Welfare Functions and Social Choice Theory

- •Varian, ch. 17
- •Feldman Ch. 9, 10
- •Sen, Amartya K., Collective Choice and Social Welfare, chaps. 3, 3*
- 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.

XI. Second-Best Allocation Mechanisms: Equity, Efficiency, and Government Revenue

- •Varian Ch. 22
- Auerbach, A., *Handbook of Public Economics*, v.1, ch. 2, "The Theory of Excess Burden and Optimal Taxation"
 - *Mas-Colell, Whinston & Green Ch. 22A-C

XII. The Space of Economies and Equilibria, Computation of Equilibria

- •Mas-Colell, Whinston & Green, ch. 17.D, 17.E
- † D. J. Brown and R. Matzkin, "Testable Restrictions on the Equilibrium Manifold," *Econometrica*, v. 64, 1996, pp. 1249-1262.
- † Peter Dixon and B. R. Parmenter, "Computable General Equilibrium Modelling for Policy Analysis and Forecasting" chapter 1 in *Handbook of Computational Economics*, v. I, Amman, Kendrick and Rust, editors.

XIII. Why do we do 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.