**Advanced Microeconomics I: Syllabus** 

**GECO 6200** 

The New School for Social Research

Spring 2021

Basic Information:

Class Time: Mondays from 4 to 550 p.m.

Lab Time: Fridays from 155 to 345 p.m.

(Class Time and Lab Time may occasionally be inverted)

Instructor: Prof. Sanjay G. Reddy, Dept. of Economics

Office hours: by appointment

Email address: reddys1@newschool.edu (Preferred means of communication)

To ensure a response, please use as the subject heading 'Advanced Microeconomics I'. I cannot guarantee that messages which do not use this subject heading will be answered.

It is essential that every student read this syllabus in full so as to avoid subsequent questions for which answers are given here.

Office Hours (tentative): Wednesdays 4 p.m.-5:30 p.m., 6 East 16th Street, Rm. 1116.

Teaching Assistant: Marjan Fadavi Ardekani

Email address: fadam352@newschool.edu

Office Hours: TBA.

#### Course Description:

This course approaches microeconomic analysis at an advanced level, presenting some formal techniques used in economic analysis as well as critical perspectives and possible alternatives. Topics may vary from year to year and include elements of choice and decision theory, theory of the consumer and the firm, game theory, welfare economics, social choice and aggregation, and general equilibrium theory. Adequate mathematical background, including thorough prior familiarity with multivariate analysis and constrained optimization, linear algebra and matrix operations, and methods of abstract notation, reasoning and proof making, is assumed. Knowledge of elementary set theory and real analysis would be helpful. Lab sessions will be arranged. Prerequisite: GECO 6190 or permission of the instructor.

#### Aims:

The aim of this course is to introduce students to some of the techniques of microeconomic analysis which are in widespread use and to develop the basis for an informed perspective on microeconomic theory and its application. It is hoped that the student will gain a foundation with which better to undertake the critique of existing theory and the construction of alternatives. The course presents ideas, techniques and criticisms at a level of sophistication suitable for Ph.D. students aiming ultimately to conduct independent research. Microeconomics will be presented here as being more than a technical apparatus: a domain of unsettled questions and live debates, many fundamental in nature, reflecting different descriptive and prescriptive views of the world. The need to choose among these approaches or to create new ones when framing and developing arguments about the world will be a primary theme.

## Time Constraints and their Consequences:

In many institutions at least two semesters of advanced microeconomic theory are required of first year Ph.D. candidates in economics. These are among the more demanding courses in the Ph.D. curriculum in a number of them. In contrast, only one semester of advanced microeconomic theory is required of New School Ph.D. candidates. The Ph.D. level microeconomic theory curriculum in most institutions covers a fairly well-defined body of methods and topics, corresponding to those highlighted in the conventional advanced textbooks in the field, and approaches these topics in a way that does not vary greatly across institutions. This course in contrast aims not only to introduce students to 'standard' methods and topics, but also to expose them to alternative approaches and to critical perspectives. It would be simply impossible, due to constraints of time, to cover at an adequate level all of the topics studied in other leading institutions while also providing alternative perspectives on the ideas discussed and making adequate provision for class discussion. Accordingly, in this course we will sample particular methods and topics, which may change from year to year. There will be no pretense to comprehensive coverage of the standard curriculum or of alternative approaches. We shall present an overview of specific topics without always going into depth. Still, we may not succeed in covering all of the topics described in this syllabus.

A student who takes the class should, despite the constraints we face, gain some exposure to forms of reasoning, methods and topics that will serve as useful reference points in subsequent work. Inevitably, the student who intends to continue in research of any kind, whether theoretical or applied, will have to undertake further informal study of the subject. This is typically the case for students in all institutions, and indeed disciplines, but it is all the more true of those preparing themselves for economic research at the New School.

#### *Methods of Learning:*

The material of the course can be arrived at from a variety of perspectives. Reading a textbook carefully and following the presentation of results is very useful and likely

necessary, but problem solving is also valuable. Students are encouraged to form small groups, which may meet to discuss concepts, study proofs, answer questions, or study for exams. Students are highly encouraged to form such small groups (preferably of three or four persons) at the beginning of the term and to set a weekly time to meet. Students may approach the teaching assistant for help in forming such groups or in joining one, if they wish. Students will find regular attendance at lectures and lab sessions to be invaluable: Although much of the standard material is presented the primary textbook the alternative perspectives are usually not, so the other readings are also very important.

#### MOOC and Videos:

A prior version of this course was videotaped in the Fall 2012 for the purpose of developing a Massive Open Online Course or MOOC (in collaboration with the Institute of New Economic Thinking or INET). We strongly recommend that students watch the relevant videos *before* coming to class, as this will allow us to use class time more productively (to contextualize arguments, address questions of clarification, discuss specific topics more intensively, etc.). If students come to class with a questions or discussion topics based on the videos viewed, class time can be used to further students' understanding. The videos represent an early 'edition' of the class and the ideas, and understanding, of the instructor have evolved since, but they still provide a useful resource, and indeed an essential complement to the course.

The playlist of videos can be found below.

Lecture 1, The Queen of Social Sciences:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZbgLy0on9VQAVNajp1-5-U3

Lecture 2, Consumers: The Samuelsonian Program:

 $\underline{https://www.youtube.com/playlist?list=PLmtuEaMvhDZZsehVGMa\_Hqk4GaPOKTfse}$ 

Lecture 3, Consumers, Demand:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZbMICKH3OdQYS Pams81xEu

Lecture 4, The Theory of the Firm:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZaC-DJ9RQv6c-S5uOOL4Mgt

Lecture 5, Risk and Uncertainty:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZYQ9Ybrny16qtbRkUWkrlMd

Lecture 6, Basic Concepts of Game Theory:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZYaxCLXxK1UqYAV4\_C5Bw5C

Lecture 7, Bargaining, Norms, Institutions:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZY3M47cVW5VRH6HOPRVBJGq

Lecture 8, Markets: 'Partial Equilibrium': Analysis of Individual Markets:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZaZ9UkuQh4DoAvE7FCffyLn

Lecture 9, Markets: 'Partial Equilibrium': Externalities and Public Goods:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZZZTjp7lanWeGUDu6\_HEoic

Lecture 10, Social Welfare and Judgment:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZZ2tCkK9D3LJq-Aj4jyxFXB

Lecture 11, General Equilibrium Theory:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZbjczrZN77wc7CNyNB39HEG

Lecture 12, General Equilibrium Theory: Possible Extensions and Applications:

https://www.youtube.com/playlist?list=PLmtuEaMvhDZZTT30dcKM0TwWGbQ0hvukt

Another Important Resource: INET Blog

We would also like to draw your attention to our entries on the blog "Reading Mas-Colell" available on the website of the Institute for New Economic Thinking:

https://www.ineteconomics.org/perspectives/blog?g=reading+mas-colell#facets

The blog was written to provide a critical companion to the study of microeconomic theory at the advanced level, and makes reference to relevant parts of the text, as well as the other readings and articles listed in this syllabus. Here is a list of the entries that together provide a fairly comprehensive complement to the course topics. The entries represent our best effort to provide a critical perspective on each of the topics. We hope that you will find them helpful and will also read them prior to coming to class. They may be considered recommended readings for the appropriately corresponding sections of the course:

- Situating Microeconomics
- Some Considerations on 'Rationality'
- Is The Weak Axiom of Revealed Preference Falsifiable?
- Rigor Mortis?
- Pleasure, Happiness and Fulfillment: The Trouble With Utility
- The Theory of the Firm: Language, Model and Reality
- "Choice Under Uncertainty": A Misnomer
- Thirteen Ways to Split a Cake
- Game Theory: Too Much and Too Little?
- Solomonic Judgment vs. Sophists. Economists and Calculators
- Public Goods and Externalities: Theory vs. Society
- General Equilibrium: Sound and Fury Signifying Nothing?

#### Methods of Evaluation:

There will be five group-based problem sets, a critical review essay and an in-class final exam (see below for due dates).

Problem Sets: Collaboration is encouraged on the problem sets. A set of questions and answers will be handed out together. Everyone is urged to belong to a group of two or more persons, but individual answers will also be accepted. Each group is expected to meet, to attempt to solve the problems on their own, and only then to compare their answers with those given, discussing the answers further if necessary to understand them. Each member of the group is expected to discuss the concepts, problems and solutions with others and demonstrate satisfactory understanding. Each problem set will be graded on a pass-fail basis and account for five percent of the course grade (i.e. the problems sets will together form twenty five percent of the course grade). The names of all members of the group should appear on the front page of each problem set handed in. It is highly recommended that students give adequate time to complete the problem sets in order to learn the material. Answers to the problems will generally not be discussed in lab or in class, due to lack of time. The problem sets should be uploaded to Canvas by midnight on the given due date.

Critical Review Essay: A critical review essay (not more than 800 words or roughly three double spaced pages in length) of an article or book on a microeconomic topic (whether theoretical or applied) of the student's choosing, from the reading list or from another academic source is also required. The review should describe and critically assess the approach taken and suggest possible alternatives if appropriate. It will form twenty percent of the course grade. The take home examination should be uploaded to Canvas by Friday, April 30<sup>th</sup> at midnight.

Final Exam: The take-home final exam (covering all of the material of the course, and focusing on essay and identification questions) will form forty percent of the course grade. It will be handed out on Wednesday, May 12<sup>th</sup> and should be uploaded to Canvas by Friday, May 14<sup>th</sup> at midnight. All answers should be produced individually, without consultation with others or use of the textbook or other aids.

Participation: Attendance and informed and constructive participation in class and laboratory discussions will account for the remaining fifteen percent of the course grade.

Philosophy: The problem sets and the exams require that the student demonstrate a combination of knowledge of the technical material and interpretative or critical faculties, as reflected in short answers and essays. In this course puzzle solving abilities (reflected, for instance, in the ability to solve problems with great speed) will be emphasized less than will deeper understanding.

#### Textbooks:

The primary (required) textbook for the course, reflecting the 'standard' curriculum, will be the latest edition of Mas-Colell, Whinston and Green's *Microeconomic* 

Theory [henceforth MWG], Oxford University Press. The secondary textbook (not strictly required, but recommended for use in a similar way, and the subject of parallel assigned readings) will be *Microeconomic Analysis* by Hal Varian (W.W. Norton and Company). Other recommended texts for use alongside are *Microeconomics: Behavior, Institutions and Evolution* by Samuel Bowles (Princeton University Press) which has quite a bit of 'alternative' content, and the more standard *Lecture Notes in Microeconomic Theory* by Ariel Rubinstein (available on the author's

website http://arielrubinstein.tau.ac.il/). Further useful texts covering the 'standard' curriculum include A Course in Microeconomic Theory by David M. Kreps and his Notes on the Theory of Choice. Some students may also find helpful Advanced Microeconomic Theory by Geoffrey A. Jehle and Philip J. Reny or other similar texts available on the market. Each of these texts has its merits and demerits. They have substantial areas of topical and methodological overlap, although their expositions are different. In this course, we will supplement these texts with a range of additional materials, so as to provide critical and contextual perspectives not otherwise contained in standard microeconomics courses. These materials may be introduced on an ad hoc basis as the course proceeds. More detailed subsequent versions of the syllabus containing these readings may be posted on the course website (via Canvas). Students should consider the online version of the syllabus authoritative at any moment. Required and recommended readings will be distinguished on the syllabus by the placing of an asterisk (\*) in parentheses after a required reading. Required readings are listed first. Although entire chapters from MWG are assigned, it will often be difficult or impossible for students to read these in full. More specific guidance will be provided if that is possible prior to the classes in question. In this course, much of the technical material will be taken up in the lab rather than in the lecture, as the latter will give greater attention to discussion of context, critical perspectives and alternatives.

Apart from its limited perspective, the text (MWG) presents the standard material in an uninviting manner. This may sometimes be for good reason. For example, results are often presented in uncompromising detail as well as generality. However, we use it as our primary reference point as, (1) it is fairly comprehensive in the topics covered within the standard theory, allowing for useful flexibility (2) it presents formal arguments in a fairly 'rigorous' fashion that can open doors to reading the standard body of technical literature (although this is not the same thing as sophistication of reasoning generally), (3) because of its relative comprehensiveness in dealing with the standard literature, it may provide a useful resource to return to in one's subsequent work without having to look to other sources (4) it has become an 'industry standard' which is taught in leading mainstream graduate programs in economics and thus provides a common reference point as well as a useful window on prevailing discourse (the economics 'language game') and (5) its drawbacks, such as its failure to acknowledge alternate perspectives, are shared in some measure by the major competing texts.

Students are, however, encouraged also to invest in the other texts mentioned above so as to have more accessible and complementary resources to which to turn for the exposition of key ideas and for alternative perspectives. The textbook by Samuel Bowles is, as noted above, among those mentioned that which presents an alternative perspective to an extent and will thus be of special interest to many students. It reflects

a very different conception of the major themes and also (perhaps by conscious intent) emphasizes technicalities the least. However, no one textbook captures the material of this course and the various additional readings (assigned below) form an integral part of the course materials.

#### Role of Mathematics:

The study of standard microeconomics can often seem like the study of applied mathematics. We intend to use as much mathematics as required and not more, especially in the lectures, in which we will attempt to introduce as much interpretative and contextual content as possible. Although mathematics can be an essential clarificatory tool, in economics it often has the effect of creating barriers to entry or becoming a technique of obfuscation. Although we cannot avoid its use - in light of the manner in which standard economic theory has evolved - we will try to be aware of these dangers.

A certain level of mathematical proficiency will be assumed. In particular, knowledge of basic mathematical notation and concepts related to sets, functions, matrices, probability, linear algebra, multivariable calculus and constrained optimization, among other topics, will be assumed. Elementary techniques of real analysis can be helpful, especially in understanding proofs. These may be referred to but will not be essential for succeeding in the course. Students may occasionally find one of the many available introductory real analysis books to be a helpful supplement. Some advance exposure to basic concepts within this field will be very valuable. The appendices on mathematical concepts and techniques in a number of the advanced microeconomics texts (including MWG and Varian) recommended above are helpful and may be entirely sufficient. However, they can only be useful to the extent that the student reads them. Please refer to these appendices and other materials as you require. There are many other potentially useful background resources presenting the mathematical techniques used in standard economics, along with economic concepts and applications. These are too numerous to mention but examples are Fundamental Methods of Mathematical Economics, by Alpha Chiang and Kevin Wainwright, Optimization in Economic Theory, by Avinash K. Dixit or Analytical Methods in Economics by Akira Takayama. The student with a more advanced background in applied mathematics can draw on many other useful resources that are not specifically tailored to economics. The TA will provide guidance to the extent feasible, although primary responsibility for command of basic background mathematical concepts rests with the student, as it is a prerequisite for the class.

#### 'Learning Outcomes':

The New School requires me to cite the intended 'learning outcomes' on the syllabus:

Students will become familiar with an important part of the body of standard microeconomics taught in the curricula of most economics programs at the Ph.D. level.

They will develop an understanding of ideas and techniques at a level of sophistication suitable for Ph.D. students aiming to conduct independent research and to interact with peers who are economists. The primary methods of assessment will consist of the inclass final examination (with a focus on the conceptual framework), the problem sets (with a focus on technical problem solving), and the critical review essay (requiring students to demonstrate their familiarity with microeconomic theory, while considering in greater depth a specific topic). Finally, lab participation will also allow students to display their level of engagement with the material and to be credited for that, while gaining familiarity with the active use of the concepts of the course.

Students will be expected to apply the mathematical techniques which are in widespread use in Ph.D. programs in order to solve various problems found in the body of advanced standard microeconomics. The primary method for digesting the more technical materials of microeconomic theory, in addition to reading the text, will be the pass-fail problem sets. Students can ask for additional problems and solutions if they wish. The critical review essay and the in-class final exam may (to varying degrees) also provide an opportunity for students to display some understanding of the technical contents of the course as a basis for demonstrating knowledge and critical perspective. Students will be expected to develop an informed and independent perspective on microeconomic theory by reading required texts and articles, while also assimilating some of the optional readings.

As already noted, the primary methods of assessment will be the final in-class exam, which will test the students' ability to demonstrate knowledge of and critically assess the scope and relevance of ideas encountered in the course; the problem sets, which will encourage student effort to absorb and actively apply the more technical concepts and techniques; and the critical review essay, which will provide an opportunity for critical engagement with microeconomic research. The secondary method of assessment will be the extent of informed participation in the classroom and lab as well as in online discussions.

## Plagiarism Policy:

Students are expected to have read the New School policy on plagiarism and academic honesty at the following website:

www.newschool.edu/WorkArea/DownloadAsset.aspx?id=81698

#### Student with Disabilities:

In keeping with the university's policy of providing equal access for students with disabilities, any student with a disability who needs academic accommodations is welcome to meet with me privately. Students requesting any accommodations ought also to contact Student Disability Service (SDS). SDS will conduct an "intake" and, if appropriate, the Director will provide an academic accommodation notification letter for you to bring to me.

Topics, Dates and Readings:

The following schedule is purely **tentative** and may be revised depending on our progress and other considerations.

#### 1. THE 'QUEEN OF THE SOCIAL SCIENCES'?

# Class 1: Perspective and Orientation - February 1st

- (i) The character of social enquiry and explanation, the place of methodological individualism, economics as language, the influence of ambient 'common sense' (ideology), what is to be valued and why, the traditions of political economy, the relations between critique (internal and external) and construction.
- (ii) The subject matter and structure of the course.

## Readings:

Lukes, S. (1969). Methodological Individualism Reconsidered. *British Journal of Sociology*. 19 (2):119-129 (\*)

McCloskey, D. (1988). *The Rhetoric of Economics*. University of Wisconsin Press, Madison. [Ch. 1] (\*)

Putnam, H. (2002). *The Collapse of the Fact-Value Dichotomy and Other Essays.* Harvard University Press, Cambridge, MA. (selection) (\*)

Sen, A. (1977). Rational Fools: A Critique of the Behavioral Foundations of Economic Theory. *Philosophy and Public Affairs*.6(4):317-344 (\*)

Unger, R. M. (1996). The Disciplinary Tools of Democratic Experimentalism. *What Should Legal Analysis Become*, (pp:22-25) (\*)

Weber, M. (1978). Economy and Society. Vol.1 University of California Press, Berkeley, CA. (pp 24-26) (\*)

Ambirajan, S. (1978). *Classical Political Economy and British Policy in India*. Cambridge University Press, Cambridge, UK.

Guha, R. (1996) *A Rule of Property for Bengal.* Duke University Press, London, Boston. (Reprint). [Intro, Ch.4,5]

Marglin, S.A. (2008). *The Dismal Science: How Thinking Like an Economist Harms Community.* Harvard University Press, Cambridge, MA. [Ch. 1-4]

Mirowski, P. (1989). The Ironies of Physics Envy. In *More Heat Than Light* Cambridge University Press, Cambridge, UK. [Ch. 7]

Nelson, R.H. (2001). *Economics as Religion: From Samuelson to Chicago and Beyond.* Pennsylvania State University Press, University Park, PA. [Intro + Ch.1-3]

Robbins, L. (1945). *An Essay on the Nature and Significance of Economic Science*, Second Edition, Macmillan and Co.

Spiegler, P. (2012). The unbearable lightness of the economics-made-fun genre. *Journal of Economic Methodology*, 19(3), 283-301.

Spiegler, P. (2015) A Constructive Critique of Economic Modeling. Cambridge University Press. [Ch. 2]

Tribe, K. (1978). Land, Labour and Economic Discourse. Routledge and Kegan Paul. [Ch. 1,6,7]

#### 1. 'CONSUMERS'

# Class 2: The Samuelsonian programme: attempting to unify positive and normative theories of choice - February 8th

MWG Readings: Chapters 1 (\*) and 2 (\*)

Varian Readings: 7, 8.7

## Other Readings:

Piore, M.J. (1995). *Beyond Individualism* [Ch. 4-5]. Harvard University Press, Cambridge, MA (\*)

Putnam, H. (2002). On the Rationality of Preferences. In *The Collapse of the Fact-Value Dichotomy and Other Essays*. Harvard University Press, Cambridge, MA. (\*)

Sahlins, M. (2004). The Original Affluent Society. *Stone Age Economics*. Routledge, (Reprint of 1974 edition) (\*)

Sen, A. (1997). Maximization and the Act of Choice. *Econometrica*, 65(4):745-780. (\*)

Sen, A. (2002) Consistency of Choice. In *Rationality* and *Freedom*. Harvard University Press, Cambridge, MA. (\*)

Aldred, J. (2007) Intransitivity and Vague Preferences. *Journal of Ethics* 11(4): 377-403.

Camerer, C., Loewenstein, G. and Rabin, M., editors, (2004). *Advances in Behavioral Economics*. Princeton University Press. [Ch. 4, 5]

Csikszentmihalyi, M. (1990). Flow: The Psychology of Optimal Experience. Harper and Row, New York. [Ch. 1,4,7]

Friedman, M. (1966). The Methodology of Positive Economics. In *Essays In Positive Economics*. University of Chicago Press.

Georgescu-Roegen, N. (1968). "Utility", International Encyclopedia of the Social Sciences Macmillan: New York.

Harbaugh, W.T., Krause, K. and Berry, T.R. (2001). GARP for Kids: On the Development of Rational Choice Behavior. *American Economic Review*, 91(5): 1539-1545.

Nandy, A. (2012), The Idea of Happiness. Economic and Political Weekly, 47(2): 45-48.

Scitovsky, T. (1976). The Joyless Economy. Oxford University Press, 1976. [Ch. 3-4]

Sen, A. (1971). Choice Functions and Revealed Preference. Review of Economic Studies 38(3):307-317.

Sen, A. (1995). Is the Idea of Purely Internal Consistency of Choice Bizarre? In James, E., Altham, J. and Harisson R., editors, *World, Mind and Ethics: Essays on the Ethical Philosophy of Bernard Williams*. Cambridge University Press, Cambridge, UK.

Slote, M. (1989). Beyond Optimizing: A Study of Rational Choice. Harvard University Press, Cambridge, MA. [Ch. 3]

Strotz, R.H., (1955-56). Myopia and Inconsistency in Dynamic Utility Maximization. *Review of Economic Studies*. Vol. 23(3):165-180.

Wong, S. (1978). *The Foundations of Paul Samuelson's Revealed Preference Theory.* Routledge and Kegan Paul, 1978. [Ch. 4-5]

# Class 3: Demand – February 22<sup>nd</sup> (15<sup>th</sup> is President's Day Holiday)

MWG Readings: Chapter 3 (\*) and 4 (not required but highly recommended)

Varian Readings: Chapters 7, 8 and 10, except 10.7 (\*)

Other Readings:

Becker, G. (1962). Irrational Behavior and Economic Theory. *Journal of Political Economy.* 70(1):1-12. (\*)

Afriat, S.N. (1967). The Construction of Utility Functions from Expenditure Data. *International Economic Review*, 8(1):67-77.

Becker, G. S., & Murphy, K. M. (1988). A theory of rational addiction. *Journal of Political Economy*, 675-700.

Corrigan, P. (1997). *The Sociology of Consumption: An Introduction*. SAGE Publications.

Deaton, A., & Muellbauer, J. (1980). An almost ideal demand system. *American Economic Review*, 312-326.

Hildenbrand, W. (1994). *Market Demand: Theory and Empirical Evidence*. Princeton: Princeton University Press.

Lavoie, M. (2006). *Introduction to Post-Keynesian Economics*. Palgrave Macmillan. Selection.

Lee, F. and Keen, S. (2011) The Incoherent Emperor: A Heterodox Critique of Neoclassical Microeconomic Theory, *Review of Social Economy*, 62(2): 169-199.

Macpherson, C.B. (1962), *The Political Theory of Possessive Individualism*, Oxford University Press [Ch. VI]

Varian, H. (1982). The Nonparametric Approach to Demand Analysis. *Econometrica*, 50(4):945-973.

### **Problem Set I distributed**

III. 'FIRMS'

Class 4: Production: March 1st

MWG Readings: Chapter 5 (\*) [Appendix not required]

Varian Readings: Chapters 1 through 6

## Other Readings:

Lavoie, M. (2006). *Introduction to Post-Keynesian Economics*. Palgrave Macmillan, selection (\*)

Lazonick, W.(1991). Business Organization and the Myth of the Market Economy. Cambridge University Press. [Ch. 3,6,7] (\*)

Simon, H. (1979). Rational Decision Making in Business Organizations: Nobel Lecture. *American Economic Review*, 69(4): 493-513. (\*)

Weitzman, M.L., and G. Xu, Chinese Township-Village Enterprises as Vaguely Defined Cooperatives, *Journal of Comparative Economics* 18, (April 1994): 121-145. (\*)

Bewley, T. (1999). Why Wages Do Not Fall During a Recession. Harvard University Press, Cambridge, MA [Ch. 1,2,20,21]

Berle, A. and Means, G. (1967). *The Modern Corporation and Private Property*. Harcourt, Brace & World: New York. [Book 1: Ch. 5-6, Book 2: Ch. 3-4]

Dow, G. (2003). *Governing the Firm: Workers' Control in Theory and Practice*. Cambridge University Press, Cambridge, UK [Ch. 7–9]

Edwards, R. (1979). Contested Terrain: The Transformation of the Workplace in the Twentieth Century. Basic Books. [Ch.2-6]

Galbraith, J.K. (1985). *The New Industrial State*. Houghton Mifflin Company: Boston. [Ch.V-VIII]

Marglin, S.A. (1974). What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production. *Review of Radical Political Economy*, 6(2): 60-112.

Mazzucato, M. (2013). *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. Anthem Press

Nelson, R.R. and Winter, S.G. (1982). *An Evolutionary Theory of Economic Change*. Harvard University Press, Cambridge, MA [Ch.1-2]

Sabel, C.(1994). Learning by Monitoring: The Institutions of Economic Development. In Smelser, N.J and Swendberg, R., editors, *The Handbook of Economic Sociology.* Princeton University Press, Princeton, NJ. pp. 137-165

Williamson, O.E. (1975). Markets and Hierarchies. The Free Press [Ch. 1,2,12,13]

## Problem Set I due

#### 1. DECISIONS AND GAMES

# Class 5: Risk and Uncertainty - March 8th

MWG Readings:

Chapter 6 (\*) [6.A through 6.C required, 6.D recommended].

## Other Readings:

Camerer, C., Loewenstein, G. and Rabin, M., editors (2004). Advances in Behavioral Economics. Princeton University Press, Princeton, NJ. chapters 4 and 5.(\*)

Shackle, G.L.S. (1955). *Uncertainty in Economics and Other Reflections*. Cambridge University Press, Cambridge, UK. pp. 1-74. (\*)

Freeman, D. (2011). *How to Dispel your Illusions*. The New York Review of Books. Available at: <a href="http://www.nybooks.com/articles/archives/2011/dec/22/how-dispel-your-illusions/">http://www.nybooks.com/articles/archives/2011/dec/22/how-dispel-your-illusions/</a>.

Gilboa, I. and Schmeidler, D. (1989), Maxmin Expected Utility With Non-Unique Prior, *Journal of Mathematical Economics* 18: 141-153.

Harsanyi, J.C. (1975). Can the Maximin Principle Serve as a Basis for Morality? A Critique of. John Rawls's Theory. *American Political Science Review*, 69:594-606, reprinted in Harsanyi, J., *Essays on Ethics, Social Behaviour and Scientific Explanation*, Kluwer.

Kahneman, D. (2013), *Thinking Fast and Slow,* Farrar, Straus and Giroux [Ch. 25-27]

Keynes, J.M. (1937), The General Theory of Employment. *The Quarterly Journal of Economics*, 51(2): 209-223.

Loomes, G. and Sugden, R. (1982), Regret Theory: An Alternative Theory of Rational Choice Under Uncertainty. *The Economic Journal*, 92(368): 805-824.

Luce, R.D. and Raiffa, H. (1989) *Games and Decisions: Introduction and Critical Survey.* Dover (Reprint). [Ch. 13]

Machina, M., entry on "Non-expected Utility Theory" International Encyclopedia of the Social Sciences, 2<sup>nd</sup> edition

Rawls, J. (1971). *Justice as Fairness: A Restatement.* Harvard University Press, Cambridge, MA. Part III, pp. 80-134.

Problem Set II distributed. Problem Set II due March 15th.

# Class 6: Basic Concepts of Game Theory - April 5th

MWG Readings: Chapters 7(\*), 8(\*), 9A and 9B (\*). [Rest of chapter 9 is recommended].

Varian Readings: Chapter 15. Varian does not cover dynamic games.

# Other Readings:

Sen, A. (1987). *On Ethics and Economics*, Basil Blackwell. Welfare, Goals and Choices, pp. 80-88 (\*)

Sen, A. (2002). Goals, Commitment and Identity in Rationality and Freedom, Harvard University Press.(\*)

Bowles, S. (2004), Microeconomics: Behavior, Institutions and Evolution, Ch. 2

Economic Sciences Prize Committee of the Royal Swedish Academy of Sciences (2012), Stable Allocations and the Practice of Market Design, Scientific Background on Nobel Prize. Available

at <a href="http://www.nobelprize.org/nobel\_prizes/economics/laureates/2012/advanced-economicsciences2012.pdf">http://www.nobelprize.org/nobel\_prizes/economics/laureates/2012/advanced-economicsciences2012.pdf</a>

Hargreaves, S.P. and Varoufakis, Y. (1995). *Game Theory: A Critical Introduction*. Routledge, 1995.

#### **Problem Set III distributed**

# Class 7: 2 April, Bargaining, Norms, Institutions - April 12th

MWG Readings: Chapter 22 - Section 22.E (\*) [Sections 22.A-D and Chapter 9 Appendix A are recommended.]

Note that Sections 22.A-D are only recommended, for now. They will enhance your understanding of Section 22.E. Sections 22.A-D will be required reading for Week 10. Social Welfare and Judgment.

## Other Readings:

Agarwal, B. (1997). 'Bargaining' and Gender Relations: Within and Beyond the Household. *Feminist Economics*, 3(1). (\*)

McDonald, I. and Solow, R. (1981). Wage Bargaining and Employment. *American Economic Review*, 71(5):896-908. (\*)

Sen, A. (1990). Gender and Cooperative Conflict. In Tinker, I., editor, *Persistent Inequalities: Women and World Development*. Oxford University Press, New York, New York. Pages 123-149. (\*)

Svejnar, J. (1986). Bargaining Power, Fear of Disagreement, and Wage Settlements: Theory and Evidence from U.S. Industry. *Econometrica*, Vol. 54(5): 1055-1078. (\*)

Anderlini, L. (2007), Lecture Notes on Nash Bargaining, available on http://faculty.georgetown.edu/la2/Bargaining.pdf.

Bowles, S. (2004), Microeconomics: Behavior, Institutions and Evolution, [Ch. 5]

Elster, J. (2011), "Norms", The Oxford Handbook of Analytical Sociology: <a href="http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199215362.001.0001/oxfordhb-9780199215362-e-9">http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199215362.001.0001/oxfordhb-9780199215362-e-9</a>

Folbre, Nancy (2001). *The Invisible Heart: Economics and Family Values*. New York: New Press. [Ch. 1-2]

Gaertner, W. (2009). A Primer on Social Choice Theory. Oxford University Press, USA. [Ch. 8]

Gaertner, W. and Klemisch-Ahlert, M. (1992). Social Choice and Bargaining Perspectives on Distributive Justice. Springer-Verlag. [Ch. 3]

Gould S.J., Lewontin R.C. (1979). "The Spandrels of San Marco and the Panglossian Paradigm: A Critique of the Adaptationist Programme". *Proc. R. Soc. Lond.* B, Biol. Sci. 205 (1161): 581–98.

Greif, A. (2006). *Institutions and the Path to the Modern Economy:* Lessons from *Medieval Trade.* Cambridge University Press, Cambridge, UK. [Part II Ch.3-5]

Hodgson, G.M. (1988). *Economics and Institutions: A Manifesto for a Modern Institutional Economics*. Polity Press. [Ch. 6,7,8]

Lukes, S. (2007). "Power" Contexts special issue on justice and change, 6(3): 59-61

North, D. (1993). Nobel Prize Lecture.

available on <a href="http://nobelprize.org/nobel\_prizes/economics/laureates/1993/north-lecture.html">http://nobelprize.org/nobel\_prizes/economics/laureates/1993/north-lecture.html</a>

#### **Problem Set III due**

### MARKETS: 'PARTIAL EQUILIBRIUM'

## Class 9: Analysis of Individual Markets - April 19th

MWG Readings: Chapters 10(\*) and 12 [A-D (\*)+ Appendix A(\*)]. Also recall sections on Compensating and Equivalent Variation from Chapter 3.

Varian Readings: Chapters 13 and 22

## Other Readings:

Akerlof, G.A. (1970), The Market for Lemons: Quality Uncertainty and the Market Mechanism, *The Quarterly Journal of Economics*, Vol. 84, No. 3 (Aug., 1970): 488-500 (\*)

Hann, C. And Hart, K. (2011). Economic Anthropology. Polity. [Ch. 1-6] (\*)

Akerlof G.A. and Shiller R.J.,(2015). *Phishing for Phools: The Economics of Manipulation and Deception*. Princeton University Press.

Banerjee, A. (1992), A Simple Model of Herd Behavior, *The Quarterly Journal of Economics*, Vol. 107, No. 3 (Aug., 1992): 797-817

Black, F. (1986). Noise. The Journal of Finance, Vol. 41, No. 3 (Jul., 1986): 529-543

Geertz, C. (1963). Peddlers and Princes. The University of Chicago Press.

[Ch. 3,4]

Shaikh, A. (2013). On the role of reflexivity in economic analysis. *Journal of Economic Methodology*, Vol. 20, No. 4: 439-445.

Weitzman, M. (1974). Prices vs. Quantities. *Review of Economic Studies*, 41(4):477-491

### **Problem Set IV distributed**

## Class 10: Externalities and Public Goods: April 26th

MWG Readings: Chapter 11 (\*)

Varian Readings: Chapter 23 and 24

## Other Readings:

Ostrom, E. (1990). Governing the Commons, Cambridge University Press. [Ch.1-3] (\*)

Coase, R. (1960). *The Problem of Social Cost*, Journal of Law and Economics, Vol. 3 (Oct., 1960), pp. 1-44

Scitovsky, T. (1954). *Two Concepts of External Economies.* The Journal of Political Economy. Vol 62, No.2 143- 151

Barrett, S. (2007. Why Cooperate? The Incentive to Supply Global Public Goods. Oxford University Press.

Green, D.P. and Shapiro, I. (1994). The Paradox of Voter Turnout, in *Pathologies of Rational Choice*, Yale University Press.

Lindahl, E. (1919). Just Taxation - A Positive Solution, in *Classics in the Theory of Public Finance*, Palgrave Macmillan UK. pp 168-176

Kolm, S. (2010). History of Public Economics: The Historical French School., Economics, EHESS, Institute of Public Economics and CREM, Paris.

Papandreou, A.A. (2003). Externality, Convexity and Institutions. *Economics and Philosophy*, 19:281-309.

Tuck, R. (2008). *Free Riding.* Harvard University Press. [Intro, Concl. to Part I, Concl. to Part II]

#### **Problem Set IV due**

#### 1. SOCIAL WELFARE AND JUDGMENT

# Class 11: Social Judgments, Social Welfare and other Aggregative Concepts – May 3rd

MWG Readings: Chapters 21(\*) and 22 A - D (\*)

Varian Readings: Chapter 22

# Other Readings:

Sen, A. (1992). *Inequality Reexamined*. Oxford University Press, Selection (\*)

Sen, A. (1995). Rationality and Social Choice, Presidential Address of the American Economic Association, *American Economic Review*. (\*)

Sen, A. (1970). The Impossibility of a Paretian Liberal, *The Journal of Political Economy*, Vol. 78, No.1: 152-157(\*)

Sen, A. (1998). The Possibility of Social Choice, Nobel Lecture

http://www.nobelprize.org/nobel\_prizes/economic-sciences/laureates/1998/sen-lecture.pdf (\*)

Arrow, K. (1978). Extended Sympathy and the Possibility of Social Choice, *Philosophia*, 7(2): 223-237.

Gaertner, Wulf. (2009). *A Primer on Social Choice Theory.* Oxford University Press, USA. [Ch. 1-3 and 7].

Hinich, M.J. and Munger, M.C. (1997). *Analytical Politics*. Cambridge University Press, 1997 [Section 1]

Pattanaik, P.K. and Y. Xu (2007) Minimal Relativism, Dominance, and Standard of Living Comparisons Based on Functionings, *Oxford Economic Papers* 59(2): 354-374.

#### Problem Set V distributed

#### VII. GENERAL EQUILIBRIUM THEORY

Class 12: 'Equilibria': Welfare Characteristics, (In)Existence, (In)Stability – May 10th

MWG Readings: Chapters 15(\*) (other than 15.D), 16 (\*)(Other than 16.G and Appendix) and 17(\*) (other than 17.D., 17.E., 17.G., 17.I and Appendices).

Varian Readings: Chapters 17 (except 17.8, 17.9), 18 (except 18.9)

## Other Readings:

Hayek, F.A. (1945). The Use of Knowledge in Society, *American Economic Review*, 35(4):519-530. (\*)

Rizvi, A. (2006), "The Sonnenschein-Mantel-Debreu Results after 30 Years." *History of Political Economy* (2006) 38 (Suppl 1), 228-245. (\*)

Scarf, H. (1960), "Some Examples of Global Instability of the Competitive Equilibrium" *International Economic Review*, 1(3): 157-172. (\*)

Stiglitz, J. (1994). Whither Socialism? MIT Press, Cambridge, MA. [Ch. 3,4](\*)

Velupillai, V. (2005), "The Foundations of Computable General Equilibrium Theory", Working Paper No. 93, Department of Economics, National University of Ireland, Galway (\*)

Burgstaller, A.C. (1994). Property and Prices. Cambridge University Press. [Ch. 2]

Dixit, A. "Whither Greenwald-Stiglitz?", mimeo, Princeton University.

Dreze, J. (1989). Labour Management, Contracts, and Capital Markets: A General Equilibrium Approach. Blackwell. [Intro + Ch.1]

Dreze, J. (1993). Self-Management and Economic Theory: Efficiency, Funding and Employment. In Bardhan, P. and Roemer, J., editors, *Market Socialism*. Oxford University Press.

Greenwald, E. and Stiglitz, J.E. (1984). Externalities in economies with imperfect information and incomplete markets. *Quarterly Journal of Economics*. 101: 229-264.

Hahn, F. (1988). On Market Economies. In Skidelsky, R., editor, *Thatcherism.* Basil Blackwell.

Kehoe, T. (1985). Multiplicity of equilibria and Comparative Statics. *The Quarterly Journal of Economics* 100(1): 119-147.

Koopmans, T.(1957). Three Essays on the State of Economic Science, McGraw-Hill. Essay 1

Weintraub, E.R. (1993). *General Equilibrium Analysis: Studies in Appraisal.* University of Michigan Press. [Ch.2,4,8,10]

#### Problem Set V due

Class 13: Possible Extensions and Applications: Uncertainty in General Equilibrium, International Trade, Entitlements, Property Rights and Regimes – if an additional date can be found

MWG Readings: Chapter 19(\*)[A-D required, Rest of 19 recommended] , Chapter 15.D (\*)

## Other Readings:

Arrow, K.J. (2009). Economic Theory and the Financial Crisis. unpublished manuscript of keynote address, Beijing Forum, November 6th, 2009. (\*)

Sen, A. (1982). *Poverty and Famines An Essay on Entitlement and Deprivation.* Oxford University Press. esp. Chapters 1-6 and Appendix A. (\*)

Gomory, R. and Baumol W.J. (2000). *Global Trade and Conflicting National Interests*. MIT Press. esp section I (Chapters 1-5),

Lipsey, R.G. (1956-1957). The General Theory of the Second Best. *Review of Economic Studies*, 24(1):11-32.

Unger, R.M. (2007). *Free Trade Reimagined.* Princeton University Press. [Ch. 2] "Troubles: The Incompleteness of Comparative Advantage" available at *press.princeton.edu/chapters/s* 8473.pdf

Weber, S. (2004). *The Success of Open Source,* Harvard University Press, 2004. esp. Chapters 3,5 and 6.

Banerjee, A., and Yakovenko V.M (2010), Universal Patterns of Inequality, *New Journal of Physics* 12 (2010) 075032 (25pp), http://physics.umd.edu/~yakovenk/papers/2010-NJP-v12-n7-p075032.pdf

**Article Review due** 

Class 15: 14 May: In-Class Final Exam