

Economics 8100/CRN 81724
Applied Microeconomic Analysis / Fall 2008
Bruce A. Seaman

LOGISTICS: MW: 3:00-4:15 P.M.; Room 327, Sparks Hall; Office: 532 AYSPS (14 Marietta Street); Office phone: 404-413-0157; e-mail: bseaman@gsu.edu or secobas@aol.com. Office fax: 404-413-0145.

CATALOG DESCRIPTION: This course provides comprehensive coverage of microeconomic topics by analyzing the applications of the theory. A graphical and intuitive approach is stressed in addition to the mathematical. Topics include both the standard and the new consumer theory, production and cost analysis, modern theories of the firm and markets, and basic welfare economics. Applications useful to business students are also provided.

LEARNING OBJECTIVES: By learning the theory through mastering its problem solving potential, the student gains an appreciation for economics as a way of thinking about the world and a methodology rather than merely a series of topics. Because rational choice modeling has limitations as well as demonstrated strengths, students are also exposed to criticisms (focusing especially on the growing behaviorist literature) so as to generate a more sophisticated appreciation for the use of economic analysis in research and applied problem solving. Given the varied backgrounds and degree programs of the students, students are given a wide variety of applications so as to generate a functional mastery of microeconomic techniques that they will confront in the academic literatures in their own fields.

PREREQUISITES: Econ 3910 or MBA 8403 (intermediate micro theory, or MBA micro), and Econ 6030 or Dsc 8040 (basic calculus and algebra).

TEXTS: Robert H. Frank, *Microeconomics and Behavior*, 7th Edition, McGraw-Hill, 2008.

Designated “F” in the reading assignments. The 6th edition has essentially the same chapters as the 7th, but with some differences in content and page numbering. It is best to have the 7th edition, but the 6th is manageable, and in fact has some additional useful material that was dropped from the latest edition.

Note: From the Preface (page xv), you will note the website address for this text from which you can access appendices and the answers to all end of the chapter problems (accessible from the instructor's manual when you use a password that will be given in a bulletin board message on uLearn/WebCT).

Walter Nicholson and Christopher Snyder, *Microeconomic Theory: Basic Principles and Extensions*, 10th Edition, Thomson-Southwestern, 2008.

Designated “N” in the reading assignments. The 9th edition is also manageable, although there are some chapter re-numberings and consolidations, and other changes. It is best to have the 10th

edition.

ADDITIONAL MATERIALS: A few carefully selected journal articles may be distributed to exhibit particular theoretical tools of analysis as they are actually used by researchers. ULearn is used to distribute various lecture supplements, exams and some readings. Therefore, please check the Econ 8100 ULearn pages regularly. It is an important teaching and communications tool for this class. Note that the most important feature on ULearn is “Discussions,” where I will post announcements, assignments, and attach files. Finally, “My Grades” is used to record the results of exams.

Sample exams and selected solutions will be posted periodically. These will serve as problem sets and occasional discussion topics during class. Answers to selected end of chapter questions are provided in the Nicholson text (to the odd-numbered problems). For the Frank text, problem solutions are available on his web page using a password, as noted above.

IMPORTANT UNIVERSITY POLICY STATEMENT: The instructor is required to report any student who has ceased to attend class and give that student a WF (withdrawal failing) as of a date approximately at the mid-point of the semester. Any such student receiving financial aid may be required to refund any financial support. Therefore any student, who for legitimate reasons (illness, family crises etc.) must be absent from class for any period of time exceeding two (2) classes is strongly advised to inform the instructor in advance.

COURSE PHILOSOPHY: Pedagogically, this course follows the same philosophy that has led to University of Chicago related scholars receiving about 30% of the Nobel Prizes in Economics. It is best stated as follows:

“The course tries to present a rigorous and systematic statement of the principles economists have developed to understand the allocation of resources. The emphasis, however, has been on the value of these principles in understanding the world about us. (And) the most efficient way to learn economic theory is to solve the many problems that test one's understanding.”

Gary Becker (Nobel Prize 1992), from the Preface to his *Economic Theory*, Alfred A. Knopf, 1971.

“These days a book in microeconomics cannot contain a single derivative, or even very many equations, yet send the message that the form of economics is its scientific substance. The students learn economic calculus before they learn to reason economically, and their capacity for reasoning is permanently damaged. The point is not to banish formal training from economics, but to place it at the right stage of the educational process.”

Deirdre McCloskey (Univ. of Illinois; formerly of the University of Chicago and the University of Iowa) from the Preface of her text cited above.

“I wrote *Microeconomics and Behavior* in the conviction that the teaching of intuition and the teaching of technical tools are complements, not substitutes. Students who learn only technical tools rarely seem to develop any real affection for our discipline, and even more rarely do they acquire

that distinctive mindset we call ‘thinking like an economist.’ By contrast, students who develop economic intuition are stimulated to think more deeply about the technical tools they learn and to find more interesting ways to apply them. Most important, they usually end up *liking* economics.”

Robert Frank (Cornell Univ.; Ph.D. UCLA), from the Preface of the text, exhibiting the perspective of one lucky enough to be educated by that “classic” text of non-technical rigor, *University Economics*, by UCLA professors Armen A. Alchian and William R. Allen, Wadsworth, 1967.

“In almost anyone else's hands, this model would have got bogged down in a mathematical morass of matrix inverses and fixed points. It needed Krugman's deeper understanding of the problem to cut it down to its essentials and express the argument in simple diagrams. As he himself says, ‘often the truest sophistication is finding a way to express novel ideas with no more than a diagram or a numerical example.’”

Avinash Dixit praising the 1991 John Bates Clark Medal winner, Paul Krugman, (in particular some of his work on strategic trade theory), *Journal of Economic Perspectives*, Spring 1993, p. 182.

COURSE REQUIREMENTS: An open-book midterm exam plus an open-book final exam are scheduled. These are distributed via uLearn or email addresses and must be completed within 24 hours. An optional second exam will also be given prior to the final exam. Note that the exams are not formally comprehensive, but focus on new topics. Assigned problems should be completed to prepare for the exams, but will not be graded. Class discussion is encouraged. Classes are missed strictly at your own risk, given the supplemental material to be presented and the problems to be discussed. The university Policy on Academic Honesty (Section 409) fully applies and any violation of this policy will result in very severe penalties. You absolutely must work on exams independently.

COURSE GRADING POLICY: The exams are weighted roughly equally. However, a somewhat higher weight is assigned to the final exam if that grade is higher than the midterm exam. Also, for those taking the optional second exam, that grade is averaged with the midterm grade to generate a “modified” midterm grade (but this can only improve your grade or leave it unchanged; it cannot lower your grade). Also, the numerical scores on all exams are translated into a letter grade based on the average performance, i.e., the letter grades are “curved” (e.g., if the average is 75 and the range is 45 to 94, an 82 is likely to become a B+ and a 48 a C-/D+), but this translation will vary with each grade distribution). This course follows the policy of the Andrew Young School in assigning + and – grades consistent with Georgia State University on such grading. The final grade is calculated essentially by translating the letter grades back into simpler numerical equivalents on a scale of 0 to 12 (A+ = 12, B = 8, C+ = 6, etc.) and averaging them back into a letter grade using any applicable weights as described above.

OFFICE HOURS: No formal office hours are kept, but appointments are easily made, and emailed questions are promptly answered. After class is also a good time.

COURSE SCHEDULE: (Problems will be assigned separately, but not graded; they will frequently be discussed in class); October 1 is the last day to withdraw and receive a “WP.” NOTE: The course syllabus provides a general plan for the course; deviations may be necessary and will be

announced if they occur.

DATES TOPICS AND ASSIGNED READING

(Excludes Appendices unless specifically included; those are generally optional).

8/18: Introduction/Background/Logistics.

8/20 The core concepts of micro-theory; initial applications

F: Chs. 1 and 2 (temporarily skip Appendix; to be covered later)

F: Ch. 12, pp. 377-379 (basic relationships between total, average and marginal revenue in graphical form).

N: Ch. 1 (Review Ch. 2 for some useful mathematical background, especially basic optimization concepts and calculus review, elasticity, the Lagrangian multiplier method, and homogeneous and homothetic functions. While the other topics are important in microtheory, the mathematics of those techniques is not explicitly relied upon in this particular course).

8/25 Unconstrained vs. constrained maximization analysis as applied to consumer choice theory

F: Ch. 3 (plus Appendix)

N: Ch. 3

N: Ch. 4 to Example 4.1 on p. 121

8/27: Initial sample problems; catch-up on reading/lecture topics; Income vs. Substitution effects

F: Ch. 4 to p. 108

N: Ch. 5 to p. 148; pp. 155-158

9/1: NO CLASS: Labor Day Holiday

9/3: Income vs. substitution effects continued; Hicks vs. Slutsky; Compensating vs. Equivalent variations in income

F: Ch. 4 continued to p. 108

N: Ch. 5, p. 155 - 158

Readings posted on uLearn: Varian Ch. 8, "Slutsky Equation"

"Some Evidence on the Alchian and Allen Theorem..." Bertonazzi et al *Economic Inquiry*, July 1993

9/8: More constrained optimization problems; labor markets and inter-temporal choices

F: Ch. 5 (temporarily skip “Using Price Elasticity of Demand,” and “Consumer Surplus”)
F: Ch. 14 (“The Supply of Labor,” pp. 464-470); Overtime problem; see uLearn
N: Ch. 16, pp. 573-577

In-class and uLearn posting re: “The Effect of Compensation Awards Upon Consumption and Savings,” Slesnick and Dolin, *Journal of Forensic Economics*, May 1988

- 9/10: Demand and elasticities; functional forms (Cobb-Douglas and others)
- N: Ch. 4, p. 121 (Example 4.1) to end
N: Ch. 5, pp. 148-154; pp. 158- 161
F: Ch. 4, pp. 109 – end (plus Appendix); F: Ch. 5, “Using Price Elasticity; 153-155
- F: Ch. 12, pp.377-384 (provides further overview of price, elasticity and marginal revenue relationships). Also, N: Ch. 11, 359-365 for the same reason.
- 9/15: Relationships among elasticities and further applications; Sample exam problems
- N: Ch. 5, pp. 161-165
N: Ch. 6 to p. 191
- 9/17: Consumer surplus: Derivation and uses; Revealed preference theory
- N: Ch. 5, pp. 165-end
F: Ch. 5, pp. 144-147
Readings posted on uLearn: Varian Ch. 14, “Consumer Surplus”
- 9/22: Cognitive limitations; the debate about taste formation and stability; Home production and the Lancaster attributes analysis and examples; possible handout also on the Becker model of consumer behavior
- F: Ch. 7; uLearn posting re: Rawls *Theory of Justice*
N: Ch. 6, pp. 191-end
uLearn posting on Lancaster analysis
- 9/24: More on Linear Attributes model; extension to Becker model of household production
- uLearn posting on Lancaster analysis
uLearn posting of lecture notes regarding the Becker model and examples

- 9/29: Review in preparation for Exam I; Exam to be posted 5 PM 9/29, due 5 PM Tuesday 9/30; (At least preliminary results will be available by 2 PM 10/1)
- 10/1: Uncertainty and attitudes toward risk (standard approach):
 F: Ch. 6 (focus on von-Neumann and Morgenstern analysis)
 N: Ch. 7
- 10/6: Return and discuss Exam I. Continue analysis of attitudes toward risk; more examples.
 Complete F: Ch. 6 and N: Ch. 7
- 10/8: Begin the economics of risk: alternative viewpoints (Kahneman-Tversky and the “Behaviorists”); comparison to standard approach
 F: Ch. 8
 uLearn distribution of further articles re: behavioral economics
- 10/13: Complete cognitive limitations and the behaviorists
 Reading from 10/8
- 10/15: Overview of production and cost theory; Modern theory of the firm vs. traditional neoclassical theory. Optional exam targeted for this week (distributed 10/16; due 10/17)
 F: Chs. 9 and 10
 N: Chs. 9 and 10
- 10/20: Production and cost applications continued; extension to theory of the firm and short-run industry supply derivation
 F: Chs. 9 and 10 continued; also F: Ch. 11 (to p. 350)
 N: Chs. 9 and 10 continued; also N: Ch. 11; and N: Ch. 12 to p. 406
 uLearn supplemental lecture notes
- 10/22: Long run industry/market analysis; short run vs. long run producer surplus; economic profits vs. factor rents; review of uLearn handout problems
 F: Ch. 11 pp. 350 to end; F: Ch. 15, pp. 517-518 (“Economic Rent”)
 N: Ch. 12 pp. 406-421
- 10/27: Sample exam; supplemental discussion of relationship between short and long-run

analysis; how to analyze exogenous supply shocks; tax analysis

F: Ch. 11; F: Appendix Ch. 2; also uLearn supplemental lecture notes

N: Ch. 12; pp. 421-end

N: Ch. 13, pp. 466-475

10/29: Monopoly analysis

F: Ch. 12

N: Ch. 14

11/3: Monopoly/market power applications continued; price discrimination; tying contracts and other strategies

F: Ch. 12

N: Ch. 14 (focus on Example 14.5 and 14.6, and related uLearn lecture supplements)

11/5: Other models with market power; traditional models of imperfect competition

F: Ch. 13; p. 426 to the end.

N: Ch. 15; to p. 537

11/10: Game theory contributions and other extensions to imperfect competition modeling

F: Ch. 13 to p. 426

N: Ch. 15, pp. 537 to end

11/12: Extensions of traditional models to game theoretic settings continued

Reading from 11/10

11/17: Overview and review of monopoly power vs. competitive analysis; supplemental sample exam problems

11/19: Labor and input market analysis

F: Ch. 14 (skip previously covered labor supply section)

N: Ch. 16 (pp. 577-end)

11/24: Input analysis continued; more sample exam problems

F: Ch. 14 (plus Appendix)

N: Ch. 16

11/26: NO CLASS; Thanksgiving Holiday

12/1: Selected topics regarding capital; Exhaustible resources

F: Ch. 15 (plus Appendix)

N: Ch. 17 (selected pages; to be clarified based on time constraints)

12/3: Time permitting: Selected topics in public policy; public goods and externalities

F: Ch. 16 (pages to be clarified based on time constraints)

The open-book home final exam will be distributed on Thursday December 4, due 24-hours later on Friday, December 5