Microeconomics for Health Care Professionals

Syllabus Version Date: August 29, 2011 **HPA 586 – Fall 2011**

LEPH Room 126 Thursday 10:00-11:50 Doug McKee LEPH Room 315 Phone: 310-266-2438 douglas.mckee@yale.edu

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Room: TBD

Overview

This course is a first course in microeconomic analysis. While the material will be accessible to students with no economics background, we will cover some topics at the intermediate level. This course will develop a theoretical framework for analysis and apply this framework to real-world issues. Particular attention will be paid to health and health care applications, though in the first weeks of the course we must build a general foundation of knowledge of economic analysis before we turn to focus on health. We will examine the choices of both individuals and of firms in a variety of market environments. By the end of the course, students should (1) be familiar with the basic tools of microeconomic analysis (e.g., supply and demand), (2) have an understanding of their usefulness and limitations, and (3) have experience applying these tools to issues in health and health care.

Requirements

The course requirements are: completion of assigned weekly problem sets, a midterm examination and a final examination. The midterm will count for 35 percent of your grade and the final exam for 50 percent. Class participation will count for 5 percent of your grade. The examinations will be in-class; books and notes cannot be used during examinations. The final examination will be cumulative. The midterm will be in class on October 20. The final exam will be during exam week at our regularly scheduled class time (December 15 at 10:00am). If you have a conflict with either of these exams, you must let me know several weeks prior to the exam date.

Completion of problem sets will count for 10 percent of your grade. The problem sets will be graded as credit/no credit, with all problem sets handed in on time receiving credit for the assignment. It will be extremely difficult to do well on the midterm and final exams unless you can solve the types of problems assigned in the problem sets.

<u>Problem solutions must be written independently</u>. Problem sets will be posted on the class website by the end of the day Thursday. Answer sheets will also be posted on the website on the day the homework is due, but after noon.

Our Teaching Fellow, Kimberly Kushner, will hold weekly office hours to answer specific questions raised in lecture, readings or problem sets. While attendance is not required, in the past students have found these sessions to be extremely useful.

Course exemption requests:

Individuals who were economics majors should exempt out of this course; Health Economics (Professor Busch) is a good substitute course. For non-economics majors who completed multiple courses at the level of intermediate microeconomics or above, an exemption can be granted if you are able to provide the following: when, where, syllabus, and grade of previous microeconomics course. If you have no previous coursework in **health economics**, then you will need to enroll in a substitute for this course (Busch or Forman or similar).

Readings

In the past, this course has used a textbook by Pindyck and Rubinfeld, <u>Microeconomics</u>, Prentice Hall, hereafter referred to as P&R. <u>This syllabus is for the sixth edition</u>. Please note that the course is only casually linked to this text. Some previous students have been less than enthusiastic about this textbook so it is **not** required that you purchase this textbook. It is available on Amazon used for about \$45, but there are three other sources for supplementary course materials:

- 1. The P&R book will be on reserve at the Medical Library at 333 Cedar Street.
- 2. Introduction to Economic Analysis (IEA) by R. Preston McAfee and Tracy R. Lewis is available from www.flatworldknowledge.com. You can read it for free online or purchase a pdf of the book for \$24.95. You can also purchase a black and white printed copy for \$34.95 plus shipping. Note that IEA is a bit more technical than our in-class discussions but has interesting examples and gives you more background on the topics. I will include suggested readings from this book, too.
- 3. The book, <u>A Health Economics Primer</u>, by Shirley Johnson-Lans (J-L) will also be on reserve and suggested readings are outlined below. (Used on Amazon for about \$40)

There is **no coursepack** to purchase for this course, though supplemental readings will be available on the course website. In many cases these readings provide a more policy-focused discussion of the concepts discussed in class. Students are required to do all assigned readings and these readings may be covered on the exams.

Lecture Outline

September 1: Introduction/ The Economic Problem

September 8: Market Equilibrium, Elasticity

September 15: Evaluating government policies

September 22: Externalities and Public goods

September 29: Theory of the firm: Costs of Production, Perfect Competition

October 6: Monopoly

October 13: Oligopoly, Game Theory

October 20: Midterm exam, in class

October 27: Health Insurance Theory: Risk, Expected Value, and Insurance

November 3: Health Insurance Theory: Risk Adjustment, Moral Hazard and Adverse Selection

November 10: Cost-Benefit Analysis and Policy Issues in Health Economics

November 17: Topics in Health Economics: Pharmaceutical Markets and Health Care Labor Markets

November 24: Fall Recess (No Class) December 1: Review for Final Exam December 8: Reading Week (No Class) **December 15: Final Exam in class**

HPA 586B Readings

Week 1, September 1: The Economic Problem: Production Possibilities, Opportunity Costs Reading:

P&R pp 3-11 & pp 596-598

IEA Chapter 1 (What is Economics?), Chapter 9 (Producer Theory: Costs: Types of Firms, Production Functions)

J-L pp. 3-6, 8, 315-320

Friedman, D. <u>Hidden Order: The Economics of Everyday Lif</u>e. Chapter 2 (Actions Speak Louder than Words)

Barro, R. "Pleading the Case for a Paid-Jury System." Business Week, 2002

Landsburg, SE. "Why Men Pay to Stay Married." Slate, 2000

Landsburg, SE. "Giving Your All." Slate 1997

Landsburg, SE. "Do the Poor Deserve Life Support." Slate 2006

Week 2, September 8: Market Equilibrium, Elasticity

Reading:

P&R pp 19-46

IEA Chapter 2 (Supply and Demand), Chapter 3 (Quantification)

J-L Chapter 2, 323-326

Landsburg, SE. The Armchair Economist. Chapter 1 (The Power of Incentives)

Grim, R. "Who's Got the Acid?" Slate, 2004

Hartfort, T. "A Cock-and-Bull Story." Slate 2006

Fisman, R. "Virtue for Sale. Slate 2007

Case Study: Price Elasticity, Co-pays, and medical care

Week 3, September 15: Evaluating government policies: Surpluses and Shortages

Reading:

P&R pp 122-132; pp 299-314; pp 326-332.

IEA Chapter 5 (Government Interventions: Effects of Taxes, Incidence of Taxes, Excess Burden of Taxation, Price Floors and Ceilings)

Friedman, D. <u>Hidden Order: The Economics of Everyday Life</u>. Chapter 4 (What would you give to get off a desert island?)

Friedman, D. Hidden Order: The Economics of Everyday Life. Chapter 7 (Putting It Together)

Case Study: The Market of Plasma, Organs, and Blood

Week 4, September 22: Externalities and Public goods

Reading:

P&R Chapter 18, pp 641-671

IEA Chapter 6 (Externalities), Chapter 7 (Public Goods)

J-L pp. 338

Gruber, J. "The Economics of Tobacco Regulation." Health Affairs, 2002 Vol 21(2).

"Rational Extremists." The Economist, 2004.

Landsburg, S. "Property is Theft." Slate 1997

Landsburg, SE. "No Parking Anytime." Slate 2007

"Is Santa a Deadweight Loss?" The Economist, 2001

Case Study: Soda Taxation

Week 5, September 29: Theory of the firm: Costs of Production

Reading:

P&R pp 213-225; 234-239, 261-294

IEA Chapter 9 (Producer Theory: Costs: Profit Maximization)

Friedman, D. <u>Hidden Order: The Economics of Everyday Lif</u>e. Chapter 5 (Bricks without Clay) (just skim)

Barro, R. "Attention Consumers: Creativity Never Comes Cheap." Business Week, 2000

Week 6, October 6: Monopoly

Reading:

P&R pp 339-344; 357-364; 372-377.

IEA Chapter 15 (Monopoly: Sources of Monopoly, Basic Analysis, Effects of Taxes)

Friedman, D. <u>Hidden Order: The Economics of Everyday Lif</u>e. Chapter 10 (Monopoly for Fun and Profit)

Becker, G. "Cracking the Genetic Code: Competition was the Catalyst." *Business Week*, 2000 Barro, R. "The Best Little Monopoly in America." *Business Week*, 2002

Week 7, October 13: Price Discrimination, Oligopoly, Game Theory

Reading:

IEA Chapter 15 (Monopoly: Price Discrimination), Chapter 16 (Games and Strategic Behavior: Matrix Games, Nash Equilibrium)

J-L pp. 327-333

P&R pp. 382-392, 453-463

Friedman, D. <u>Hidden Order: The Economics of Everyday Lif</u>e. Chapter 11 (Hard Problems: Game Theory, Strategic Behavior and Oligopoly)

"Pricking Consciences." The Economist, 2007

Week 8, October 20: In-class midterm exam

Week 9, October 27: Health Insurance Theory: Risk and Expected Value

Reading:

P & R Chapter 5

J-L pp. 41-45

Landsburg, S. "Does Crime Pay?" Slate 1999

Krugman, P. "The Health Care Crisis and What to Do About It." New York Times 2006

"The Missing Market." Economist, 2004

Fisman, R. "The Bad Economics of Switching Health Care Plans." Slate

Week 10, November 3: Health Insurance Theory: Risk Adjustment, Moral Hazard and Adverse Selection Reading:

IEA Chapter 19 (Information: Market for Lemons)

J-L pp. 46-51

Newhouse JP. "Patients At Risk: Health Reform and Risk Adjustment." *Health Affairs*, Spring 1994; (I): 132-146.

Kuttner, R. "How to Undermine an Ownership Society." Business Week, 2004

Landsburg, SE. The Armchair Economist. Chapter 3 (Truth or Consequences)

Landsburg, S. "Uninsured Motorist Fun." 1998

Week 11, November 10: Cost-Benefit Analysis and Policy Issues in Health Care

Reading:

IEA Chapter 11 (Investment)

J-L Chapter 9

Krugman, P. "The Medical Money Pit." New York Times, 2005

"The Price of Prudence." The Economist, 2004

Tengs, TO et al, "Five-Hundred Life-Saving Interventions and Their Cost-Effectiveness." *Risk Analysis*, 1995.

Week 12, November 17: Topics in Health Economics: The Pharmaceutical Market and the Health Care Labor Market

Reading:

J-L Chapters 6 and 11

November 25: Fall Recess (No Class)

Week 13, December 1: Review for Final Exam

December 6-10: Reading Period

December 15: Final Exam