ECONOMICS 355

HEALTH ECONOMICS

UNIVERSITY OF MICHIGAN - DEARBORN

SPRING 2000 HALF TERM SESSION I

CLASS MEETS: 10:40 MWF Room 1096 University Mall
INSTRUCTOR: B. Crowell
OFFICE: 2118 CASL Annex
PHONE: 436-9183 or messages at 593-5096
OFFICE HOURS: MWF 8:00 - 8:30 and by appointment

FINAL EXAMINATION: Wednesday, Wednesday, June 28, 12:30 p.m.

IMPORTANT DATES TO REMEMBER:

May 24: Last day to add a course or to drop a course without record.
June 5: Last day to drop a course with record of a "W".
ECONOMICS 355
HEALTH ECONOMICS

COURSE DESCRIPTION

This course examines the health care industry using the tools of
economic analysis. Topics include the demand and supply of health services,
alternative ways of financing health care, the application of cost-benefit
analysis to health projects, and comparative health systems (e.g., Britain,
Sweden, Japan).

COURSE OBJECTIVES AND GRADING CRITERIA

This course is directed toward providing the student with:

1. the conceptual and theoretical bases for the economic analysis of
   health and the health care industry,
2. the ability to apply the tools of economic analysis to the health
   care sector,
3. an understanding of the relationship of economics and health and
   the ability to demonstrate this interaction using an analytical
   framework,
4. the methodological frameworks forascertaining and evaluating the
   impact of health projects,
5. an understanding of alternative economic strategies in health care
   (e.g., the various means of organizing and financing health care,
   the relative effectiveness of various national systems), and
6. an understanding of important issues and problems in the areas of
   health economics and health policy and the ability to analyze
   these issues from an economic perspective.

The University Bulletin requires grades, the form and meaning of which
are given in Announcement. Persons in the course determine their course
grades by demonstrating on written examinations and short assignments 1) an
understanding of the assigned readings, 2) a grasp of the material covered in
class, and 3) an ability to question, analyze, and discuss issues in health
economics. Each student will have ample opportunity to display his/her
progress in the course through performances on three unit exams, each counting
100 points, and/or 2-3 homework problems and small projects worth 150 ± 200
points. The third hour exam will be given on the day scheduled for the final
examination. PLEASE NOTE: no comprehensive final exam is scheduled for this
course, but much of the material is cumulative in nature. Each unit exam
represents approximately one-third of the material. Therefore, it is
important for the student to take each exam very seriously. The final letter
grade will be based on the following scale:

90%  A
80%  B
70%  C
60%  D
E
These figures are approximate; the instructor has been known to scale grades when to do otherwise would mean excessive chaos. Nonetheless:

1. If the grades are scaled downward, it will occur during the determination/calculation of the final course grade—not after each exam.
2. A passing grade will not be given to a score of less than 50% of the total points possible.
The average grade given in this class is a C. To earn an A or B, a student must demonstrate consistently excellent or good work respectively.

SPECIAL NEEDS

Any student with special needs requiring extra assistance should report these needs to the instructor the first day of class. The University will make reasonable accommodations for persons with documented disabilities. Students should register with the Disability Resource Services Office located in Counseling and Support Services, 1060 UMall. Eligible students who are not registered with the DSRO should do so within the first few days of the term.

IMPORTANT NOTES

1. There will be no makeup of missed exams except in highly unusual and extenuating circumstances (as determined by this instructor).
2. Attendance is not required in this course. Any student that can pass this course by merely taking the exams may do so. However, before jumping from the top of the Ren Cen in glee, it must be pointed out that statistics overwhelmingly have indicated a high correlation between the number of absences and low grades (and this instructor routinely takes attendance in order to keep these statistics updated). Experience has demonstrated that class attendance and participation are beneficial to one's understanding of the material. Exams are comprehensive, covering both class notes and reading assignments; the two are not always synonymous but instead are intended to complement one another.

NOTE WELL: Moreover, although a student's grade will not be lowered deliberately for excessive unexcused absences, there are certain things that he/she must know. This instructor will give such students:
   A. no extra help,
   B. no consideration concerning early exams or makeups,
   C. no letters of recommendation, and
   D. NO BENEFIT OF THE DOUBT IN MARGINAL CASES.

3. With respect to incompletes ("I" or "whatever happened to the semester" or "where have all the gut courses gone"), this instructor is of an unsympathetic mind. An incomplete will only be given in extremely extenuating circumstances (again, as determined by this instructor). An "I" grade is never given for unsatisfactory work.

4. Exam dates are announced at least a week ahead of time. Review questions are passed out well in advance of each exam.

5. The Final Exam for this course will take place during the official Examination Period following the end of classes. The date and
time can be found on page 10 in the official Schedule of Classes. If, with so much advance notice, you cannot manage to schedule your vacations, weddings and other auspicious occasions so as to accommodate the Final Exam, you would be well advised to drop the course forthwith.

6. This instructor takes a dim view of cheating, plagiarism, and any other violation of the Code of Academic Conduct (pp. 41-42, UM-D 1987-88 Announcement). The opportunity cost of violating the Code is high; the penalty is failure in the course.

7. Any student with special needs requiring extra assistance should report these needs to the instructor the first day of class.

8. "Watch out for flying chalk." The instructor is known for throwing chalk when she has been outjoked.

9. Grades are not posted. Students wishing to know their final exam and course grades may submit a stamped, self-addressed envelope.

10. If the office hours don't fit one's schedule, just make an appointment or stop by the office to see if I'm in.

REQUIRED READING


QUALITY newspaper every day or a good weekly news magazine.

KEY TO READING ASSIGNMENTS

S Santerre & Neun
CP Coursepack
TBA To be announced or to be assigned
Numbers in parentheses refer to approximate weeks.

COURSE OUTLINE

I. Introduction and Overview S: 1-3
   A. Nature and methodology of economics
   B. Health economics: a definition
   C. Macro issues in health
   D. Micro issues in health
   E. American health care system medical
   F. Special characteristics of health care industry
   G. Operation of medical care market: The simple case

II. Review of Supply, Demand, and Equilibrium
   A. Demand and consumption (Review principles text on
   B. Elasticity decisions, profit
   C. Supply and production maximization & market
   D. Market determination of structure)
   price and quantity

III. The Demand for Health Care (2-3)
   A. Human capital S: 4-5
   B. Need for health care
C. Factors influencing demand
D. Demand models
E. Impact of insurance (third party carriers)

IV. The Supply of Health Care

A. Review of the economics of the firm. Review principles; S: 8-9
   1. Profit maximization & competition text on costs, optional
   2. Market structure:
      perfect vs. imperfect competition
      output decisions, profit,
      market structures

B. Supply Institutions S: 14
   1. Doctors/Practitioners S: 10, 15
   2. Hospitals
   3. Drug industry & supply companies S: 16

V. Financing and Organization of Health Services S: 11-12, 17

A. Alternative methods
   1. Private insurance
   2. HMOs
   3. NHI
   4. NHS
   5. Experience of Medicare, Medicaid
   6. Government regulation

B. Comparative systems

VI. Investment in Health Care C; S: 7

A. Human capital and productivity
B. Cost-benefit analysis
C. Valuation of human life

SAMPLE QUESTIONS

EC 392 HEALTH ECONOMICS STUDY QUESTIONS
(FINAL)
Crowell

PLEASE NOTE: The final exam will be comprised of questions similar to
these and those on the first two review sheets.

1. DHEW Sec. Califano recently announced that there are too many doctors:
   Califano recommended cutting back on federal funds to medical schools
   and urged schools of medicine to voluntarily reduce enrollments.
   Califano's prognosis of the situation and his policy recommendations
   are in direct conflict with the arguments presented by Crowell,
   Kotelchuck, Sorkin, the Ehrenreickhs, and Fuchs. Using the readings and
lecture material, analyze the question of the doctor shortage -- its causes, its existence (?), documentation of its existence, implications, and remedies. On what basis might Califano argue the way he does? Evaluate his arguments and his policy proposals. HINT: See October and November issues of *Fortune*.

2. Compare and contrast three of the five national health plans discussed in class.

3. The Ehrenreichs are extremely critical of the existing health care system. Identify the system and the Ehrenreichs' major criticisms. Evaluate these charges.

4. Discuss the costs and benefits of insurance v. "free" medical care.

5. Is health a victim or cause of inflation? Justify your answer.

6. Many economists and politicians have charged that the degree of profiteering in health care is outrageous. Document the various sources of such profiteering and analyze their causes. Use the tools of economic analysis in demonstrating the nature, extent, and causes of such profiteering.

7. "Proprietary hospitals are more efficient than voluntary hospitals." True, false, or half & half? Justify your answer.

8. Identify the major factors influencing the supply of and demand for health care. How would you identify the market structure of the health care industry? What is the impact on consumers and providers or suppliers of this market structure?

9. How can the real price of medical care be lowered?
10. Analyze the following statement: "Price variations exist not only between brand and generic product but among the branded products and among the generic products as well."

11. Define, give an example, and note the relevance to health economics of the following terms: see review sheets 1 and 2. NOTE: any term used in class or in the assigned readings is fair game.

12. Recently politicians have questioned last year's massive swine flue vaccine program. Present the arguments both for and against the program.

13. Meeting the health needs of the poor and persons with prolonged illnesses are unsolved problems. How might these problems be solved? What programs have been directed to these problems? What results have occurred?

14. The existence of "medical empires" is jeopardizing a competitive market in health care delivery. Critically evaluate.

15. Read the following article or excerpt: Analyze the arguments presented.

16. What justification is there for discriminatory pricing in health care? Identify the positive and negative impacts of such a pricing policy.

17. Outline a comprehensive plan for increasing productivity, economic efficiency, and technical efficiency in the health care industry.

**LIST OF ABBREVIATIONS & SYMBOLS**

*Not all inclusive. Others will be given in class.

B benefits
B-C, BC, or CB benefit-cost analysis or Blue Cross
BC-BS, BCBS Blue Cross-Blue Shield
BS Blue Shield or . . .
C cost of consumption
C-E or CE cost-effectiveness analysis
C-I co-insurance
C-O or CO cost-outcome analysis
CPI Consumer Price Index
Cr consumer
d, D demand or deductible
Dr doctor, physician or practitioner
e, E elasticity or equilibrium
e_d, e_s, e_c, e_y demand elasticity, supply elasticity, cross elasticity, income elasticity
f, F factor, input resource
g government
HC health care
HCI health care index
HE health economics
HK human capital
HMO health maintenance organization
HR, HRD human resources, human resources development
HS health services
i, I investment or interest or input, factor resource
ine or in-e inelastic
IRR internal rate of return
<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
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<tbody>
<tr>
<td>K</td>
<td>capital</td>
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<tr>
<td>LR</td>
<td>long run or long term</td>
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<td>m, M</td>
<td>monopoly</td>
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<td>MB</td>
<td>marginal benefit</td>
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<td>MC</td>
<td>marginal cost or medical care or monopolistic competition</td>
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<td>MEC</td>
<td>medical care price index</td>
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<td>MH</td>
<td>manhour</td>
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<td>mkt</td>
<td>market</td>
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<td>NHI</td>
<td>national health insurance</td>
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<td>NHS</td>
<td>national health service</td>
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<td>NPV</td>
<td>net present value</td>
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<td>P, P_p, P, P_o</td>
<td>price or physician, price of product, price of other goods, price of factor</td>
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<td>o, O</td>
<td>output or oligopoly</td>
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<td>O/MH</td>
<td>output per manhour</td>
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<td>OSHA</td>
<td>Occupational Safety &amp; Health Act</td>
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<td>PHP</td>
<td>prepaid health plan</td>
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<td>PI</td>
<td>price index of personal income</td>
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<td>PV, NPV</td>
<td>present value, net present value</td>
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<td>Q_d, Q_s</td>
<td>quantity demanded, quantity supplied</td>
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<td>r</td>
<td>interest</td>
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<td>RoR</td>
<td>rate of return</td>
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<td>s, S</td>
<td>supply or subsidy</td>
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<td>SR</td>
<td>short run</td>
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<td>t, T</td>
<td>tax</td>
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<td>TC</td>
<td>total cost</td>
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<td>TE</td>
<td>total expenditure or total revenue</td>
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<td>third party carrier</td>
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<td>transfers</td>
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<td>total revenue or total expenditures</td>
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<td>Y, Y_r, Y_m</td>
<td>income, real income, money income profits</td>
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