## STATE UNIVERSITY OF NEW YORK COLLEGE OF TECHNOLOGY CANTON, NEW YORK



## **MASTER SYLLABUS**

## ECON 310 - ECONOMICS OF HEALTH CARE

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SCHOOL OF BUSINESS AND LIBERAL ARTS
BUSINESS
FALL 2019

- **A. TITLE**: Economics of Health Care
- B. **COURSE NUMBER:** ECON 310
- C. <u>CREDIT HOURS</u>: 3
- **D.** WRITING INTENSIVE COURSE: No
- E. GER CATEGORY: None
- F. <u>SEMESTER(S) OFFERED</u>: Fall and Spring

## G. COURSE DESCRIPTION:

This course introduces students to the discipline of health economics and applies economic concepts to the health care sector. Topics to be covered include the demand for health care, health production and costs, health care markets models, health insurance markets, managed care, structure, conduct and performance of pharmaceutical, physician, and hospital services industries. In addition, the role of government in health care markets and various healthcare reforms proposed in the U.S. and overseas is discussed.

## H. PRE-REQUISITES/CO-REQUISITES:

- a. Pre-requisites Principles of Microeconomics (ECON 103) and Statistics (MATH 141) OR Research Methods in Health Sciences (NURS/DHYG 370) OR Research Methods in Social Sciences (SSCI 370)
- b. Co-requisite(s): None

| STUDENT LEARNING OUTCOMES: Course Student Learning Outcome [SLO]  | <u>PSLO</u> | <u>GER</u> | <u>ISLO</u>  |
|---|-------------|------------|--|
| a. Explain the usefulness of economics in understanding matters of life, death, disability, and suffering   |             |            | Communication Skills<br>Written [W]                              |
| b. Apply basic microeconomic concepts to analyze production of health care goods and services   |             |            | Critical Thinking Critical Analysis [CA]                         |
| c. Compare methods of economic evaluation (cost-of-illness studies, cost-benefit analysis, cost-utility analysis, and cost-effectiveness analysis) used in health care decisions making |             |            | Industry, Professional, Discipline Specific Knowledge and Skills |
| d. Examine economic and noneconomic variables that influence the demand for and supply of health, medical care and health insurance   |             |            | Critical Thinking Critical Analysis [CA]                         |
| e. Identify production and cost functions of medical firms (hospitals, physician clinics, nursing homes, and pharmaceutical companies) and health insurance industry                    |             |            | Industry, Professional, Discipline Specific Knowledge and Skills |
| f. Analyze physician and hospital services, long-<br>term care, health insurance and pharmaceutical<br>industries using the structure-conduct-  |             |            | Critical Thinking Critical Analysis [CA]                         |

| performance paradigm   |  |
|--|--|
| g. Explore the changing nature of health and medical care and the implications for medical practice, medical education and research, and health policy     | Critical Thinking Critical Analysis [CA]                         |
| h. Analyze public policy in health and medical care from an economic perspective   | Industry, Professional, Discipline Specific Knowledge and Skills |
| i. Identify the factors that determine the supply and demand for medical manpower: nurses, technicians, dentists, pharmacists, and physicians              | Industry, Professional, Discipline Specific Knowledge and Skills |
| j. Discuss controversies surrounding the development of health insurance and the government's role in providing, financing, and regulating health services | Communication Skills<br>Written [W]                              |

| KEY  | <b>Institutional Student Learning Outcomes [ISLO</b> |
|------|--|
|      | 1-5]   |
| ISLO | ISLO & Subsets                                       |
| #    |  |
| 1    | Communication Skills                                 |
|      | Oral [O], Written [W]                                |
| 2    | Critical Thinking                                    |
|      | Critical Analysis [CA], Inquiry & Analysis [IA],     |
|      | Problem Solving [PS]                                 |
| 3    | Foundational Skills                                  |
|      | Information Management [IM], Quantitative            |
|      | Lit,/Reasoning [QTR]                                 |
| 4    | Social Responsibility                                |
|      | Ethical Reasoning [ER], Global Learning [GL],        |
|      | Intercultural Knowledge [IK], Teamwork [T]           |
| 5    | Industry, Professional, Discipline Specific          |
|      | Knowledge and Skills                                 |

# J. APPLIED LEARNING COMPONENT: Yes\_\_\_\_ No\_\_X\_\_\_

## K. <u>TEXTS:</u>

A. As determined by instructor. Current possible texts include:

Folland, S., A.C. Goodman, and M. Stano. (2013). *The Economics of Health and Health Care*, 7/e, Pearson Prentice Hall: Upper Saddle River.

Henderson, J. W. (2012). *Health Economics and Policy*. 5<sup>th</sup> Edition, South-Western, Cengage Learning.

Santerre, R. E. and S.P. Nuen. (2013). *Health Economics: Theories, Insights, and Industry Studies*. 6<sup>th</sup> Edition, South-Western, Cengage Learning.

## L. REFERENCES:

Arrow, K. J. (1963). "Uncertainty and the Welfare Economics of Medical Care." The *American Economic Review*, 53(5): 941-973.

Gaynor, M. S. and D. Haas-Wilson (1999). "Change, Consolidation and Competition in Health Care Markets." *Journal of Economic Perspectives*, 13(1):141-164.

Grossman, M. (1972). "On the Concept of Health Capital and the Demand for Health." *The Journal of Political Economy*, 80(2): 223-255.

Gruber, J. and B. C. Madrian. (2002). "Health Insurance, Labor Supply, and Job Mobility: A Critical Review of the Literature," *NBER Working Paper*, 2002.

Kessler, D. P. and M. B. McClellan (2002). "The effects of hospital ownership on medical productivity." *RAND Journal of Economics*, 33(3): 488-506.

Manning, W. G., J. P. Newhouse, et al. (1987). "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment." *American Economic Review* 77(3): 251-277.

Rizzo, J. (1999). "Advertising and Competition in the Ethical Pharmaceutical Industry: The Case of Antihyper-Tensive Drugs." *Journal of Law and Economics*, XLII: 89-116.

Sloan, F. A. and C.-R. Hsieh (2008). "Effects of Incentives on Pharmaceutical Innovation." *Incentives and Choice in Health Care*, Sloan and Kasper, eds., p.227-262.

Uwe, E.(1972). "A Production Function for Physician Services." *The Review of Economics and Statistics*, 54(1):55-65.

- M. **EQUIPMENT:** Technological enhanced classroom.
- N. GRADING METHOD: A-F

## O. SUGGESTED MEASUREMENT CRITERIA/METHODS:

Case studies analysis, class participation and presentation, research paper, quizzes, tests, essays, and/or exams.

## P. DETAILED COURSE OUTLINE:

- I. Introduction to Health Economics
  - A. Relevance of Health Economics
  - B. Economic Principles applied to Health and Health Care
  - C. Empirical Testing of Health Economics Theories
  - D. Cost-Benefit, Utility, Minimization, and Effectiveness Analysis
- II. Production, Cost and Technology of Health Care
  - A. Production of Good Health
  - B. Cost Theory of the Representative Medical Firm
  - C. Theories and Empirical Studies on the Role of Schooling in Health
  - D. Technological Change and Efficiency Analysis
- III. Demand for Health Capital
  - A. Theory of Human Capital
  - B. Investment and Consumption Aspects of Health
  - C. Demand for Health Capital
  - D. Determinants of Equilibrium of Healthy Days
- IV. Demand and Supply of Health Insurance

- A. Theory of Risk and Insurance
- B. Demand for Health Insurance
- C. Supply of Health Insurance
- D. Health Insurance Markets

#### V. Demand for Health Services

- A. Theory of Demand for Health Services
- B. Total Utility and Marginal Utility Curves for Health Services
- C. Demand Curves for Health Services
- D. Health Insurance and Demand for Health Services

## VI. Economics of Managed Healthcare

- A. Economic Characteristics of Managed Care
- B. Development and Growth of Managed Care Plans
- C. Modeling Managed Care
- D. Managed Care Competition and Technological Change

## VII. Economic Behavior of Non-Profit Firms

- A. Existence and Prevalence of Non-Profit Firms
- B. Non-Profit Firms and Health Care Markets
- C. Models of Non-Profit Hospitals
- D. Efficiency of Non-Profit Firms versus Profit Firms

## VIII. Hospital Services Industry

- A. Structure of the Hospital Services Industry
- B. Hospital Utilization and Costs
- C. Conduct of the Hospital Services Industry
- D. Performance of the Hospital Services Industry

## IX. Physician Services Industry

- A. Structure of the Physician Services Industry
- B. Model of the Physician's Practice
- C. Conduct of the Physician Services Industry
- D. Performance of the Physician Services Industry

## X. Pharmaceutical Industry

- A. Structure and Regulation of the Pharmaceutical Industry
- B. Conduct of the Pharmaceutical Industry
- C. Performance of the Pharmaceutical Industry
- D. Research/Development and Innovation

## XI. Long-Term Care Industry

- A. Structure of Long-Term Care Industry
- B. Dual Market Model of Nursing Home Pricing
- C. Hospice, Home Heath, and Informal Care
- D. Performance of Long-Term Care Industry

## XII. Health Care Labor Markets

- A. Demand for and Supply of Health Care Labor
- B. Market for Medical Education
- C. Market for Physician Manpower
- D. Market for Registered Nurses

## Q. LABORATORY OUTLINE: N/A