

**Northwestern University**  
**Masters in Public Health Program**  
**PUB HLTH 433**  
**Health Economics and Healthcare Financing**  
**1.0 Credit**  
**Fall 2007 (October 1 – December 3, 2007)**

**Course Instructors:**

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**Course Dates:**

10 sessions over a ten-week period: Oct. 1 – Dec. 3, 2007

Monday: 6:00 – 8:50 pm

Location: Large Conference Room, Dept of Preventive Medicine  
680 North Lake Shore Drive, Suite 1102

**Course Management System (Blackboard) Address:**

<https://courses.northwestern.edu/webapps/login>

**Course Overview:**

In this class, we will examine selected topics in health economics that have major implications for healthcare delivery, healthcare financing and clinical and public health research. Essential economic theories and methods for exploring each topic will be discussed along with examples drawn from the existing research literature of the application of these theories and methods. In addition, existing empirical research will be examined and assessed. The specific topics to be examined include: consumer behavior and health demand with a special focus on the analysis of secondary data; principles of price and quality competition; principles of health insurance; and methods for economic evaluations. Students will develop a good working understanding of economic theories and methods specific to these issues examined through this course and will also learn how to apply these to research problems.

**Course Objectives:**

Selected topics in health economics will be studied in great depth through this course. By taking this course, students will be able to:

- 1) describe and apply essential economic theories and methods relevant to study of consumer behavior and health demand, the healthcare market structure and supply of services, and medical effectiveness analysis;
- 2) examine and critically assess existing empirical research that applies these theories and methods; and
- 3) describe the evolving US health delivery and financing system in a changing economic environment.

**Required Text:**

Folland, S; Goodman, AC; and Stano, M, *The Economics of Health and Health Care*, Fourth Edition, Upper Saddle River, NJ: Prentice Hall, 2004.

We will work from the textbook for much of the background readings to support the lecture material.

**Additional Readings:**

Additional readings for the class will be assigned for each class and posted on Blackboard. Material will be assigned that will serve as background or supplementary material to the textbook for the upcoming lecture.

**Classroom Presentations:**

In addition to the background readings there will be readings posted on Blackboard for classroom discussion. During each session assigned students will also be asked to lead a discussion of a specific article from the reading list for which they will have lead responsibility. These readings will generally be based on information presented in the previous week's lecture and will frequently be a paper from the scientific literature that is an application of the material from the previous week. Students will be asked to present the article at the beginning of the class session. The oral presentations will focus on: study objectives; study data and analytical methods; key study findings and implications; and study strengths and weaknesses. Each student will present at least **one** paper during the class. Participation in these presentations will be graded by course instructors and will constitute 10% of the course grade.

**Course Project:**

Each student will undertake a project that will be due at the end of the course. Student projects can take a number of different forms, including: (1) a major comprehensive review of existing literature in a specific topic area or (2) original empiric research focused on a specific research question. The objective of the course project is to apply economic theories and methods that are being studied in the class to specific topics and issues that interest the student. Students will report directly to one of the course instructors as they undertake their projects. In addition, students will regularly present information on their project throughout the quarter as noted in the course outline below. The two final deliverables for the class project will be a paper and a presentation. The final class session will be devoted to student presentations of their projects.

*Paper:*

The paper for the course project is limited to no more than 20 double-spaced pages (not including references). There is no minimum length requirement. The paper will be read by each of the instructors and a final grade for the paper will be assigned.

*Presentation:*

Each student will give an oral presentation on their course project. There is no required format for the course presentations. The presentations will be 10 minutes long with a 3 to 5 minute question and answer session. The presentations are evaluated based on the content, organization, delivery and handling of the question and answer session.

**Quizzes:**

A total of four quizzes will be given over the course of the quarter. The quizzes will be 2 questions that are limited to a one page response. The quizzes will be based on the reading material and the lectures since the last quiz. Each quiz will be worth 6.25% of your overall grade. Quizzes can not be made up, and students that miss a quiz for an excused absence in which the instructors are informed in a timely manner will receive the average score from their other quizzes for the score of the missed quiz. Students that miss a quiz due to an unexcused absence will be assigned a 0 for that quiz.

**Classroom Participation:**

This class is most interesting and engaging when there is an active discussion. Therefore, we ask that each of you come prepared to contribute to the discussion. You will be graded on your classroom participation, where participation is evaluated based upon your preparation for the class, asking questions, actively participating in discussions about the topic, or responding to questions.

**Course Grade:**

- 25% quizzes
- 35% written paper on course project (5% topic selection; 5% outline with reference list [minimum of 5 references]; 25% final paper)
- 20% oral presentation of course project
- 10% student presentation of selected course readings
- 10% general classroom participation

**Deadlines:**

- 1) October 22 – Students must express a preference for a topic for their course project and turn in a title or brief summary for their topic at the beginning of the 4<sup>th</sup> session. Students will then be assigned a course instructor who will review and discuss the student's topic with him/her.
- 2) November 12 – Students must turn in an outline of their class project that includes at least five references by the 7<sup>th</sup> session of the class.
- 3) November 26 – One copy of the final course project must be turned in at the beginning of class or e-mailed to the instructors before class begins on the 26<sup>th</sup>. Late project papers will not be accepted.
- 4) December 3 – Students will present their course project

**Previous Topics for Course Project**

The topics below represent examples of previous topics for the course project. You should feel free to select a topic of interest to you that may not be included on this list. It is essential that the topic be **focused** so that you can complete your course project in the 10-week quarter. As noted earlier, your selected project could be: (1) a major comprehensive review of existing literature in a specific topical area or (2) original data analysis focused on a specific research question. If

your course project builds on prior course work, it is essential that you clearly identify how proposed work during the quarter extends on your prior efforts. Each student will be assigned to a course instructor who will oversee the student in his/her project, including reviewing and approving the student's selected project, interacting with the student on progress throughout the quarter.

Previous topics for the course project include:

1. The Uninsured: who should bridge the gap - Uncle Sam or private sector?
2. The role of moral hazard in the universal healthcare debate
3. Physician incentives under managed care and its effects on physicians behavior
4. Cost-Effectiveness of various contraceptive methods
5. Feasibility of paying for a single payer system
6. Investment in international clinical trials
7. Critique of the State Children's Health Insurance Plan
8. Physician incentives under managed care and its effects on physicians behavior
9. How have Russia's economic changes affected healthcare
10. Pay-for-Performance as a tool for improving quality of care
11. Differences between for-profit and non-profit health care delivery
12. Hospital structure and its implications for costs of care
13. Economic cost of increased malpractice litigation
14. Policy impact of the RAND Health Insurance Experiment
15. Impact of cost sharing and prescription drug plans on usage and expenditures for prescription drugs among children
16. Literature review of the cost-effectiveness of gastric bypass surgery
17. The economics of vaccine development
18. Implementation of a junk food sin tax
19. Review of cost-effectiveness analyses of chronic disease management programs

## 20. Review of the cost-effectiveness of various HIV prevention strategies

### **Course Evaluation:**

The Programs in Public Health administer web-based course evaluations to students for each course near the end of the quarter. Your completion of both the Unit (course) and Faculty evaluations is required; failure to complete the evaluations will result in an incomplete grade until the evaluations are submitted. You will be sent the web link and instructions via e-mail later in the quarter. You will have several weeks to complete the evaluations before grades are submitted. Your evaluation of the course and faculty is anonymous; your identity can not be linked with your responses.

### **Academic Integrity:**

Academic integrity at Northwestern University is based on a respect for individual achievement that lies at the heart of academic culture. Every faculty member and student, both graduate and undergraduate, belongs to a community of scholars where academic integrity is a fundamental commitment. The Programs in Public Health abides by the standards of academic conduct, procedures, and sanctions as set forth by The Graduate School at Northwestern University. Students are responsible for knowledge of the information provided by The Graduate School on their Web page at <http://www.tgs.northwestern.edu/studentsvcs/ethics/>.

Additionally, faculty reserve the right to use the “Safe Assignment: Plagiarism Detection Tool” that is part of the Course Management System. Info about this tool is found at <http://course-management.northwestern.edu/tipsheets.html>.

## **Course Sessions:**

**Session 1:** October 1, 6:00pm to 8:50pm

Introduction

### **Topics to be covered:**

- 1) Introductions of students and course instructors
  - 2) Course overview and discussion of grading policy
  - 3) US health system and health care expenditures and finance
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**Session 2:** October 8, 6:00pm to 8:50pm

Consumer demand for health and healthcare

### **Topics to be covered:**

- 1) Utility, indifference curves, and the budget constraint
  - 2) The demand for health – trade-offs, investment/consumption, determinants
  - 3) Theoretical model for healthcare demand
  - 4) Shifts in demand, role of insurance
  - 5) Demand elasticities
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**Session 3:** October 15, 6:00pm to 8:50pm

Structure and supply of medical care markets

### **Topics to be covered:**

- 1) Supply of Services in U.S. versus Other Countries
- 2) Insurance Effects on the Supply of Services
- 3) Regulation to Control Cost and Quality

## **Quiz #1**

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**Session 4:** October 22, 6:00pm to 8:50pm

Public financing of healthcare

### **Topics to be covered:**

- 1) Medicare
- 2) Medicaid
- 3) SCHIP

## **Paper topic due**

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**Session 5:** October 29, 6:00pm to 8:50pm  
Alternative healthcare system financing

**Topics to be covered:**

- 1) State-based healthcare financing reform
- 2) Canadian healthcare system
- 3) United Kingdom healthcare system

**Quiz #2**

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**Session 6:** November 5, 6:00pm to 8:50pm  
Understanding the value of interventions

**Topics to be covered:**

- 1) Methods of evaluating medical interventions
  - 2) Measuring outcomes --- costs, effectiveness, quality of life
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**Session 7:** November 12, 6:00pm to 8:50pm  
Issues in health economic studies – pragmatic and analytic

**Topics to be covered:**

- 1) Study design in health economic studies
- 2) Evaluating uncertainty in cost-effectiveness

**Outline of Paper for Class Project**

**Quiz #3**

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**Session 8:** November 19, 6:00pm to 8:50pm  
Health economics in the pharmaceutical industry

**Topics to be covered:**

- 1) Pharmacoeconomics in decision-making
  - 2) Prescription drug benefits – tiered designs, copayments
  - 3) Medicare prescription drug benefit
  - 4) Reimportation of prescription drugs
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**Session 9:** November 26, 6:00pm to 8:50pm  
Current healthcare policy issues

**Topics to be covered:**

- 1) Pay for Performance
- 2) Health savings accounts

**PAPERS ON COURSE PROJECTS DUE**

**Quiz #4**

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**Session 10:** December 3, 6:00pm – 8:50pm  
Student presentations of course projects