

**Health Economics 01:220:417:H6 (04496)**

**This course is an upper-level elective.**

**Note: This course was previously numbered 316. Credit will not be given for taking 316 & 417. They are the same course.**

**Hickman Hall (HCK), Room 119  
Monday/Wednesday, 6:00pm – 9:40pm  
July 10 – August 16, 2017**

**Contact information**

Derek DeLia, Ph.D.  
Research Professor & Senior Health Economist  
The Center for State Health Policy  
Rutgers, The State University  
112 Paterson Street, Room 540 (Note this is not NJ Hall.)  
New Brunswick, NJ 08901  
RU Building: Institute for Health, Health Care Policy, & Aging Research (#3172)  
Campus map: <http://search.rutgers.edu/buildings.html?q=Institute%20for%20Health>

Phone: 848-932-4671

Email: [ddelia@ifh.rutgers.edu](mailto:ddelia@ifh.rutgers.edu) (Please use subject line: Health Econ 417, Summer 2017)

Office hours: Monday 4:00-5:00, Tuesday 4:00-5:00, & by appointment.  
(If the doors are locked before 5:00, please call my phone number and I will buzz you in.)

**Important dates**

Last day to drop with W grade and 50% refund	7/24/17
Proposal for small group project	7/17/17
Exam 1	7/26/17
Preliminary results for small group project	8/2/17
Exam 2	8/7/17
Last day to drop with W grade and no refund	8/9/17
Final report for small group project	8/14/17
Exam 3 (Last day of class)	8/16/17

## **Course overview**

This course is an introduction to the economics of health and healthcare. Students will apply economic reasoning to contemporary issues involving the organization, cost, and distribution of resources in the health sector. The course will focus primarily on healthcare in the United States but will include some coverage of other nations as well. The course will also emphasize the application of analytic techniques from microeconomics, statistics, and applied econometrics.

By the end of the course, students should be able to explain the pros and cons of alternative mechanisms of healthcare financing, organization, and payment as well ongoing controversies in the field of health economics. Students should also be able to critically evaluate healthcare reform proposals and design their own econometric investigation of a health economics research question.

More broadly, the course is designed to advance all of the learning goals developed by the Economics Department for all economics majors at Rutgers University as listed below.

1. Economic Literacy - Students who complete the major in economics should understand and be able to articulate, both orally and in writing, the core economic principles, concepts and theories that form the foundation for modern economic analysis and economic research.
2. Economic Numeracy - Students who complete the economics major should be familiar with the tools, techniques and methods of empirical economics. They should be able to analyze data using computer applications and should be familiar with regression methods and other statistical techniques. They should be able to read and assess general interest articles on economic topics. In addition, they should be able to understand and evaluate key findings in published economic research from a wide range of sources including academic economists, public policy 'think tanks,' and government agencies.
3. Economic Citizenship - Upon completion of the major students should be able to apply their understanding of core concepts and quantitative tools to analyze and research real world problems and evaluate alternative economic policy proposals on microeconomic and macroeconomic issues.
4. Economic Scholarship – Qualified majors should have an opportunity through such avenues as advanced coursework, faculty interactions, national and local competitions and honors courses and programs to utilize up-to-date methodological tools and become fully engaged in economic research and issues on the frontiers of economics.

## **Prerequisites**

Intermediate Microeconomics with grade of C or better  
Econometrics with grade of C or better

} The prereqs for these courses are also included as prereqs for Health Econ.

## Grading & Assignments

- Your final grade will be determined by your performance on 3 exams, unannounced pop quizzes, and a small group project described below.
- There will be no extra credit assignments. It is best if you work to do as well as possible on the assignments listed above.
- I will not give a makeup exam unless you have a well-documented official reason for missing an exam.
- The table below gives the grade allocation by assignment.

Assignment	Percentage of final grade
Highest exam score	30%
Middle exam score	20%
Lowest exam score	15%
Group project	25%
Pop quizzes	10%
Homework problems (For practice only)	0%

### Pop quizzes

Pop quizzes will be based on material covered during the day's lecture to ensure that you are paying attention and understanding fundamental concepts. **If you miss a pop quiz for any reason, there will be no makeups. However, I will drop your two lowest quiz scores (including zeros if you miss class).** Grading on the pop quizzes

Quality of work	Score
Thorough, thoughtful, careful, & neat.	100
Evidence of neatness and effort but not thorough. Some answers unclear or left blank.	75
Very little effort or understanding shown. Sloppy. Credit given for attendance only.	50
Nothing turned in.	0

will be based on level of effort and understanding as described in the table to the left. Note that you do not have to

answer every question perfectly to receive a score of 100. You need to demonstrate sincere commitment to and progress toward learning the material.

### Small group project

The project will involve econometric analysis of healthcare data. (I will give you details in a separate document.) You will be able to work in groups of 2 or 3 to do the analysis and write a final report. You can use any statistical software you wish. (Note Excel will not perform all of the calculations needed for the assignment.) In class, I will show you examples from Eviews and STATA. Eviews is available at many computer centers on campus or you can purchase a student version at the Eviews website: <http://www.eviews.com>. Alternatively, you can access STATA as an RU app or purchase a student version at the STATA website: <https://www.stata.com/order/new/edu/gradplans/student-pricing/>.

As you work on the project, you are welcome to ask me questions about the software.

## Grading

I plan to use the following grading scale after all scores have been averaged at the end of the semester. If this makes it impossible for anyone to receive an A, I will construct a curve that is more lenient after all assignments have been averaged at the end of the semester. For planning purposes, you should compare your average throughout the semester to the scale below.

Range	Grade
90-100	A
85-89	B+
80-84	B
75-79	C+
70-74	C
60-69	D
< 60	F

I will use conventional rounding methods to calculate your grade – e.g., 74.4 is rounded to 74 and 74.5 is rounded to 75. If you are one point away from a higher grade you will not get the higher grade (e.g., 89 is a B+, not an A). This is less strict than it seems because the favorable weighting of the exam grades helps you more than adding a fraction of a point at the end of the semester.

## Class attendance

Students are expected to attend all classes to learn the material, participate in class discussion, and complete pop quizzes. If you expect to miss one or two classes because of illness or a family emergency, please use the absence reporting website <https://sims.rutgers.edu/ssra/> to indicate the date and reason for your absence. An email is automatically sent to me. If an emergency prevents you from missing an exam, please email me directly at [ddelia@ifh.rutgers.edu](mailto:ddelia@ifh.rutgers.edu) as soon as you are able.

## Academic integrity

The University has clear rules about cheating and other violations about academic integrity, which apply to this course. If you are not familiar with them, please learn them at <http://academicintegrity.rutgers.edu/> . If you are honest and willing to work hard to learn the course material, this should not be an issue for you.

## Student wellness services

*Just In Case Web App*, for a mental health crisis for you or a friend:

<http://codu.co/cee05e>

*Counseling, ADAP & Psychiatric Services (CAPS)*, for non-emergency psychological health issues:

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)

*Violence Prevention & Victim Assistance (VPVA)*

(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)

*Disability Services*

(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>

*Scarlet Listeners*, for confidential peer counseling and referral hotline:

<http://www.scarletlisteners.com/> or call (732) 247-5555

## **Course materials**

- Health Economics is a dynamic and rapidly evolving field making it virtually impossible for a textbook remain up to date. Therefore, I do not assign a textbook for the course. Here are two books that might be useful for you as general references.

Thomas Getzen. Health Economics and Financing. 3<sup>rd</sup> Ed. Wiley. 2007.

S. Folland, A. Goodman, & M. Stano. The Economics of Health and Health Care. 4<sup>th</sup> Ed. Pearson Prentice Hall. 2004

- Reading materials, lecture notes, and assignments will be found on the Sakai website (<http://sakai.rutgers.edu/portal>). Please check the site regularly. I also suggest that you use a three-ring binder to keep the materials organized.
- Exam questions will be derived directly from lectures and class discussions. Therefore, regular class attendance is crucial for learning the material.

## **Course topics & reading list**

*Some modifications to the topics and readings may be made as the semester proceeds.*

### **PART I. BROAD ISSUES**

#### **I-1.) Introduction & Overview of Health Systems**

Congressional Budget Office. Technological Change and the Growth of Health Care Spending. CBO Paper, January 2008.

Kaiser Family Foundation. Summary of the Affordable Care Act. April 25, 2013 (<http://kff.org/health-reform/fact-sheet/summary-of-the-affordable-care-act/>).

Uwe Reinhardt et al. (2004), "U.S. Health Care Spending in an International Context." Health Affairs 23(3): 10-25.

Ellen Nolte and Martin McKee (2003), "Measuring the Health of Nations: Analysis of Mortality Amenable to Medical Care." British Medical Journal 327(15): 1129-1133.

Robert Blendon et al. (2003), "Common Concerns Amid Diverse Systems: Health Care Experiences in Five Countries." Health Affairs 22(3): 106-121.

### I-2.) Health Econometrics & Statistical Modeling

This topic will depend heavily on lecture notes.

David Shahian and Sharon-Lise Normand (2008), "Comparison of 'Risk Adjusted' Hospital Outcomes." Circulation 117: 1955-1963.

### I-3.) Economic Evaluation of the Health Sector

This topic will depend heavily on lecture notes.

Joshua Cohen et al. (2008), "Does Preventive Care Save Money? Health Economics and the Presidential Candidates." New England Journal of Medicine 358(7): 661-663.

Michael Rawlins and Anthony Culyer (2004), "National Institute for Clinical Excellence and Its Value Judgments." British Medical Journal 329: 224-227.

## **PART II. HEALTH INSURANCE & THIRD PARTY PAYMENT**

*For Part II of the course, you may find it helpful to examine chapters 7, 8, 11, and 12 from the Folland, Goodman, Stano text or chapters 4 and 5 from the Getzen text. Of course, everything I want you to know will be emphasized in the lectures. (The book chapters will cover many other topics that are not relevant for the course but you may find interesting.)*

### II-1.) Insurance Concepts

This topic will depend exclusively on lecture notes.

### II-2.) Cost Sharing, Demand Elasticity, and Moral Hazard

Rand Corporation (2006). The Health Insurance Experiment. Rand Health Research Highlights. Santa Monica, CA.

Thomas Rice (1992), "An Alternative Framework for Evaluating Welfare Losses in the Health Care Market." Journal of Health Economics 2(1): 88-92.

Amal Trivedi et al. (2010), "Increased Ambulatory Care Copayments and Hospitalizations among the Elderly." New England Journal of Medicine 362(4): 320-328.

Michael Chernew et al. (2010), "Evidence That Value-Based Insurance Can Be Effective." Health Affairs 29(3): 1-7.

### II-3.) Employer Sponsored Insurance (ESI)

This topic will depend exclusively on lecture notes.

### II-4.) From Managed Care to Accountable Care

Bradford H. Gray (2006), "The Rise and Decline of the HMO: A Chapter in U.S. Health-Policy History." Chapter 13 in History & Health Policy in the United States. Romary A. Stevens, Charles E. Rosenberg, & Lawton R. Burns (Eds.). Rutgers University Press: New Brunswick, NJ.

David Cutler and Louise Sheiner (1998), "Managed Care and the Growth of Medical Expenditures." Ch. 3 in A.M. Garber, ed. Frontiers of Health Policy Research. Cambridge, Mass.: MIT Press, 1998.

Health Policy Brief: Accountable Care Organizations," Health Affairs. July 27, 2010.

J. Michael McWilliams et al. (2015), "Performance Differences in Year 1 of Pioneer Accountable Care Organizations." New England Journal of Medicine 372(20): 1927-1936.

## **PART III. HEALTHCARE PROVIDERS & PAYMENT SYSTEMS**

*For Part III of the course, you may find it helpful to examine chapters 13, 14, and 16 from the Folland, Goodman, Stano text or chapters 6, 8, 9, and 11 from the Getzen text. Of course, everything I want you to know will be emphasized in the lectures. (The book chapters will cover many other topics that are not relevant for the course but you may find interesting.)*

### III-1.) Physicians

Thomas Buchmueller et al. (2014), "How Do Providers Respond to Public Health Insurance Expansions? Evidence from Adult Medicaid Dental Benefits." National Bureau of Economic Research (NBER): Working Paper No. 20053.

Derek DeLia et al. (2002), "Productivity versus Training in Primary Care: Analysis of Hospitals and Health Centers in New York City". Inquiry 39(3): 314-326.

Jonathan Ketcham and Michael Furukawa (2008), "Hospital-Physician Gainsharing in Cardiology." Health Affairs 27(3): 803-812.

### III-2.) Hospitals

J.P. Clement (1997-98), “Dynamic Cost Shifting in Hospitals: Evidence from the 1980s and 1990s.” Inquiry 34(4): 340–350.

Glenn Melnick et al. (1992), “The Effects of Market Structure and Bargaining Position on Hospital Prices.” Journal of Health Economics 11: 217-233.

James Robinson and Kimberly MacPherson (2012), “Payers Test Reference Pricing and Centers of Excellence to Steer Patients to Low-Price and High-Quality Providers.” Health Affairs 31(9): 2028-2036.

James Robinson and Timothy Brown (2013), “Increases in Consumer Cost Sharing Redirect Patient Volumes and Reduce Hospital Prices for Orthopedic Surgery.” Health Affairs 32(8): 1392-1397.

### III-3.) Pharmaceutical Firms

Federal Trade Commission. Emerging Health Care Issues: Follow-on Biologic Drug Competition. FTC Report, June 2009.

Fiona Scott Morton (1997), “The Strategic Response by Pharmaceutical Firms to the Medicaid Most Favored Customer Rules.” Rand Journal of Economics 28(2): 269-290.