ECON 590	<b>Health Economics</b>		Spring 2016	
Course Number:	ECON 590-001		Day/Time:	TTH 11:00-12:15
Credit Hours:	3.0		Term:	Spring 2016
Department:	Economics		Bldg/Room:	Gardner 209
Professor:	Donna Gilleskie		Office Hours:	TH 2:30 – 3:30 pm
Office:	06B Gardner Hall			F 9:00 – 10:00 am
Phone:	(919) 966-5372			
Email:	donna_gilleskie@unc.edu			
Webpage:	http://www.unc.edu/~dgill/links/courses/Econ590/intro.html			
Grading:	Homework/Projects	10 %	3 graded assig	gnments
	Midterm	30 %	Thu, Mar 03	
	Papers	30 %	3 five-page papers	
	Final	25 %	<b>Fri, Apr 29</b> , 12:00 – 3:00 pm	
	Participation	5 %	Engagement (attendance, comments, questions, attention)	
Textbook:	none			
Readings:	many (to be provided b	y instructor)		

## **Course Description**

The mere size of the health care sector in the US, as well as recent reforms, suggests the importance of understanding the health care market. Economists can contribute greatly to this understanding. The course is designed to equip you with tools used by economists to navigate health-related markets. It does so by illustrating how economists analyze topics related to the production of health and the demand for and supply of medical care. As a hallmark of most economic analyses, we will explore the importance of incentives in decision making (e.g., health insurance, information, etc.) with a focus on how individuals behave. You will be exposed to economic models of the demand for health, health production, medical care demand, and demand for and supply of health insurance.

### **Assignment Details**

Paper #1 is a group project with three (randomly assigned) students. Due **Thu, Feb 04**.

Paper #2 requires discussion of a recent news item that relates to topics covered in the class. Students will be randomly assigned to topics throughout the semester. The due date depends on when the assigned topic is discussed in the course. The due date will generally be one week (two class periods) after completion of that lecture topic.

Paper #3 involves a topic of your choosing, and must use economic concepts/tools we have discussed in class. Due **Thu**, **Apr 21**.

The homework assignments consist of the types of questions you might find on an exam. They are due **Feb 16**, **Mar 29**, and **Apr 26**. Solutions will be available immediately after the class period that they are due (and late homework will not be accepted).

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# Policies and Expectations

I do not provide a make-up midterm exam. If the midterm exam must be missed for an allowable reason (e.g., death in immediate family, extreme illness, mandatory court date), please notify me in advance and with documentation of the explanation within 2 business days, and I will discuss with you your options once an acceptable absence has been verified.

I will collect homework assignments at the start of class. Homework not turned in within the first 10 minutes of your section's class will be considered late, and late homework submissions will not be accepted for any reason. If you anticipate missing class on the day that an assignment is due, you may have a classmate turn in your assignment or deliver it to me in person before the due date. I will not accept homework left in my mailbox or slid under my door.

Engagement in the course (demonstrated through attendance, attention, comments, questions, active listening, and respect toward the teacher and fellow students...in a word, participation) is expected and a part of the learning experience. While I understand that students may not be able to attend every class, the student must likewise understand that an absence from class may result in a missed assignment or, more importantly, missed information and, consequently, a lower grade. I will not (and cannot) replicate our hour-and-fifteen-minute class in my office hours. It will be your responsibility to obtain the missed information. Again, attendance will not be taken, but engagement and active participation will have a positive impact on your final grade through my perception of your commitment to learn.

Students may not use laptops, tablets, phones, or similar devices during the lecture. The impetus behind this rule is: First, your contemporaries have shown that they will engage, during class, in non-course activities on these devices. Second, such activity disrupts your classmates and disruptive behavior violates section II.C.1.k of the Honor Code. Third, it interferes with your learning (see http://www.newyorker.com/tech/elements/the-case-for-banning-laptops-in-the-classroom). Numerous studies show that "disconnected" students perform significantly better than their "connected" peers.

You are expected to be honest and honorable in your fulfillment of course conduct, course assignments, and course exams. Adherence to the honor code is required (https://studentconduct.unc.edu/sites/studentconduct.unc.edu/files/documents/Instrument.pdf). You are also expected to contribute your fair share to group projects. Ratings of individual participation from each group member will be solicited.

#### Course Resources and Timetable

An outline of topics and outside reading assignments follows. Although this outline gives a chronology of topics, some deviations from the proposed order may be necessary as the class progresses. Students are responsible for attending classes and learning of any changes in the schedule. Importantly, students will learn in class each week which articles are necessary or suggested reading.

### **Topics and Readings**

# 1.) U.S. Health Spending

Fuchs, Victor R. 2012. "Major Trends in the U.S. Health Economy since 1950." *New England Journal of Medicine* 366(11):973-7. http://www.nejm.org/doi/pdf/10.1056/NEJMp1200478

Aaron, Henry J. and Paul B. Ginsburg. 2009. "Is Health Spending Excessive? If So, What Can We Do About It?" *Health Affairs* 28(5): 1260-75. http://content.healthaffairs.org/content/28/5/1260.full.pdf+html

Cutler, David M., Sanjay Vijan, and Allison B. Rosen. 2006. "The Value of Medical Spending in the United States, 1960-2000." *New England Journal of Medicine* 355(9): 920-7. http://www.nejm.org/doi/pdf/10.1056/NEJMsa054744

Preston, Samuel and Jessica Ho. 2009. "Low Life Expectancy in the United States: Is the Health Care System at Fault?" University of Pennsylvania Population Studies Center Working Paper Series, NBER Working Paper #15213.

For a contrary view to the many who believe that the US medical care system not only spends more but delivers less, the last part largely based on mortality data, see <a href="http://www.nber.org/papers/w15213.pdf">http://www.nber.org/papers/w15213.pdf</a>

or for those who prefer a short version, see the *New York Times* story <a href="http://query.nytimes.com/gst/fullpage.html?res=9902E7DE103DF931A1575AC0A96F9C8B63&sec=&spon=&pagewanted=2">http://query.nytimes.com/gst/fullpage.html?res=9902E7DE103DF931A1575AC0A96F9C8B63&sec=&spon=&pagewanted=2</a>.

Fuchs, Victor R. 2009. "Eliminating 'Waste' in Health Care." *Journal of the American Medical Association* 302(22): 2481-2. http://jama.ama-assn.org.ezp-prod1.hul.harvard.edu/content/302/22/2481.full.pdf

Bloche, M. Gregg. 2012. "Beyond the 'R Word'? Medicine's New Frugality." *New England Journal of Medicine* 366(21): 1951-3. http://www.nejm.org/doi/pdf/10.1056/NEJMp1203521

Smith, Sheila, Joseph P. Newhouse, and Mark Freeland. 2009. "Income, Insurance, and Technology." *Health Affairs* 28(5): 1276-84. http://content.healthaffairs.org/content/28/5/1276/suppl/DC1

#### 2.) What is Health Economics?

Arrow, K. 1963. "Uncertainty and the Welfare Economics of Medical Care." *American Economic Review* 53, 941-973.

http://muse.jhu.edu/journals/journal\_of\_health\_politics\_policy\_and\_law/v026/26.5arrow01.pdf

Pauly, M. 1983. "Is Medical Care Different?" in <u>Issues in Health Economics</u>. W. Greenberg (ed.), Washington: Bureau of Economics, FTC.

Pauly, M. 1988. "Is Medical Care Different? Old Questions, New Answers." *Health Politics, Policy & Law* 13, 227-238.

http://jhppl.dukejournals.org/content/13/2/227.long

Sloan, Frank A. 2001. "Arrow's Concept of the Health Care Consumer: A Forty-Year Retrospective." *Journal of Health Politics, Policy and Law* 26(5): 899-91. http://muse.jhu.edu/journals/journal\_of\_health\_politics\_policy\_and\_law/v026/26.5sloan.pdf

#### 3.) Demand for Health and Health Production

Graham, Carol, Lucas Higuera, and Eduardo Lora. 2011. "Which Health Conditions Cause the Most Unhappiness?" *Health Economics* 20: 1431–1447. http://onlinelibrary.wiley.com/doi/10.1002/hec.1682/abstract

Almond, Douglas and Janet Currie. 2011. Killing Me Softly: The Fetal Origins Hypothesis. *Journal of Economic Perspectives* 25(3): 153–172. http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.25.3.153

McGovern, Laura, George Miller, and Paul Hughes-Cromwick. 2014. Health Policy Brief: "The Relative Contribution of Multiple Determinants to Health Outcomes." *Health Affairs*, August 21, 2014.

http://www.healthaffairs.org/healthpolicybriefs/brief.php?brief\_id=123

Cutler, David, Angus Deaton, Adriana Lleras-Muney. 2006. The Determinants of Mortality. *Journal of Economic Perspectives*, 20(3): 97-120. https://www.aeaweb.org/articles.php?doi=10.1257/jep.20.3.97

Currie, Janet. 2009. "Healthy, Wealthy, and Wise: Socioeconomic Status, Poor Health in Childhood, and Human Capital Development." *Journal of Economic Literature* 47(1): 87-122. http://www.jstor.org/stable/27647135?seq=1#page\_scan\_tab\_contents

Case, Anne and Angus Deaton. 2015. "Rising Morbidity and Mortality in Midlife Among White Non-Hispanic Americans in the 21st Century." *PNAS 2015 112 (49) 15078-15083; published ahead of print November 2, 2015, doi:10.1073/pnas.1518393112* 

Ruhm, Christopher. 2015. "Recessions, Healthy No More?" *Journal of Health Economics* 42: 17-28.

http://www.sciencedirect.com/science/article/pii/S0167629615000326

Cohen, Joshua T., Peter J. Neumann, and Milton C. Weinstein. 2008. "Does Preventive Care Save Money? Health Economics and the Presidential Candidates." *New England Journal of Medicine* 358(7):661-663.

http://www.nejm.org/doi/full/10.1056/NEJMp0708558

Steward, Susan and David Cutler. 2014. "The Contribution of Behavior Change and Public Health to Improved U.S. Population Health." NBER working paper # 20631. <a href="http://www.nber.org/papers/w20631">http://www.nber.org/papers/w20631</a>

Costa, Dora. 2015. "Health and the Economy in the United States from 1750 to the Present." *Journal of Economic Literature* 53(3), 503–570. http://pubs.aeaweb.org/doi/pdfplus/10.1257/jel.53.3.503

### 4.) Demand for Health and Demand for Medical Care – in more detail

Manning, W., J. Newhouse, N. Duan, E. Keeler, A. Leibowitz, and M. Marquis.1987. "Health Insurance and the Demand for Medical Care: Evidence from a Randomized Experiment." *American Economic Review* 77(3): 251-277. http://www.jstor.org/stable/pdf/1804094.pdf

Newhouse, Joseph P. and the Insurance Experiment Group. 1993. <u>Free for All? Lessons from</u> the RAND Health Insurance Experiment, Harvard University Press, 1993.

Aron-Dine, A., L. Einav, and A. Finkelstein. 2012. "The RAND Health Insurance Experiment, Three Decades Later." NBER Working paper # 18642. http://economics.mit.edu/files/8400

Baicker, Katherine, Sarah Taubman, Heidi Allen, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Eric Schneider, Bill Wright, Alan Zaslavsky, Amy Finkelstein, and the Oregon Health Study Group. 2013. "The Oregon Experiment – Medicaid's Effects on Clinical Outcomes." *New England Journal of Medicine* 368(18): 1713-22. http://www.nejm.org/doi/pdf/10.1056/NEJMsa1212321

Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph P. Newhouse, Heidi Allen, Katherine Baicker, and the Oregon Health Study Group. 2012. "The Oregon Health Insurance Experiment: Evidence from the First Year." *Quarterly Journal of Economics* 127(3): 1057-1106.

http://qje.oxfordjournals.org.ezp-prod1.hul.harvard.edu/content/127/3/1057.full.pdf+html

Grossman, Michael. 1972. "On the Concept of Health Capital and the Demand for Health." *The Journal of Political Economy* 80(2): 223-255. <a href="http://www.jstor.org/stable/pdf/1830580.pdf">http://www.jstor.org/stable/pdf/1830580.pdf</a>

Leibowitz, Arleen A. 2004. "The Demand for Health and Health Concerns after 30 Years." *Journal of Health Economics* 23(4): 663-671. http://www.sciencedirect.com/science/article/pii/S0167629604000608

Meyerhoefer, Chad D., and Samuel H. Zuvekas. 2010. "New Estimates of the Demand for Physical and Mental Health Treatment." *Health Economics* 19(3): 297-315. http://onlinelibrary.wiley.com/doi/10.1002/hec.1476/epdf

Niteesh K. Choudhry, Jerry Avorn, Robert J. Glynn, Elliott M. Antman, Sebastian Schneeweiss, Michele Toscano, Lonny Reisman, Joaquim Fernandes, Claire Spettell, Joy L. Lee, Raisa Levin, Troyen Brennan, and William H. Shrank. 2011. "Full Coverage for Preventive Medications after Myocardial Infarction." *New England Journal of Medicine* 365(22): 2088-97. <a href="http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa1107913">http://www.nejm.org.ezp-prod1.hul.harvard.edu/doi/full/10.1056/NEJMsa1107913</a>

Kilo, Charles M. and Eric B. Larson. 2009. "Exploring the Harmful Effects of Health Care." *Journal of the American Medical Association* 302(1): 89-91. http://jama.jamanetwork.com/article.aspx?articleid=184158

Fout, Betty Tao and Donna Gilleskie. 2015. "Does Health Insurance Encourage or Crowd Out Beneficial Nonmedical Care? A Dynamic Analysis of Insurance, Health Inputs, and Health Production." *American Journal of Health Economics* 1(2): 125–164. http://www.mitpressjournals.org/doi/pdf/10.1162/AJHE a 00010

### **5.)** Health Insurance

Cutler, David M. and Richard J. Zeckhauser. 2000. "The Anatomy of Health Insurance." in <u>Handbook of Health Economics</u>, eds., Anthony J. Culyer and Joseph P. Newhouse; Amsterdam: North-Holland, 2000. http://hks.harvard.edu/fs/rzeckhau/CZ2000.pdf

# 6.) Price and Quality and Information

### 7.) Health Insurance and the Labor Market

Baicker, Katherine and Amitabh Chandra. 2006. "The Labor Market Effects of Rising Health Insurance Premiums." *Journal of Labor Economics* 24(3): 609-634. <a href="http://www.hks.harvard.edu/fs/achandr/JLE\_LaborMktEffectsRisingHealthInsurancePremiums">http://www.hks.harvard.edu/fs/achandr/JLE\_LaborMktEffectsRisingHealthInsurancePremiums\_2006.pdf</a>

Gilleskie, Donna and Byron F. Lutz. 2002. "The Impact of Employer-Provided Health Insurance on Dynamic Employment Transitions." *The Journal of Human Resources* 37(1): 129-162.

http://www.jstor.org/stable/3069606?seq=1#page\_scan\_tab\_contents

CBO. 2014. "The Budget and Economic Outlook: 2014 to 2024." February 4, 2014 (Appendix C).

http://www.cbo.gov/sites/default/files/cbofiles/attachments/45010-breakout-AppendixC.pdf

### 8.) Risky Behaviors and Information

Darden, Michael, Donna Gilleskie, and Koleman Strumpf. 2015. "Smoking and Mortality: New Evidence from a Long Panel." Working Paper.

Anderson, D. Mark. 2010. Does Information Matter? The Effect of the Meth Project on Meth Use among Youths." *Journal of Health Economics* 29(5): 732-742. <a href="http://www.sciencedirect.com/science/article/pii/S0167629610000779">http://www.sciencedirect.com/science/article/pii/S0167629610000779</a>

Bhattacharya, Jay and Neeraj Sood. 2011. "Who Pays for Obesity?" *Journal of Economic Perspectives* 25(1): 139–158.

http://www.jstor.org/stable/23049442?seq=1#page scan tab contents

Kearney, Melissa S. and Phillip B. Levine. 2012. "Why is the Teen Birth Rate in the United States So High and Why Does it Matter?" *Journal of Economic Perspectives*, 26(2): 141-166. http://pubs.aeaweb.org/doi/pdfplus/10.1257/jep.26.2.141

- 9.) Delivery of Care: Hospitals, Physicians, Long Term Care
- 10.) Pharmaceuticals
- 11.) Social Insurance Programs
- 12.) Comparative Health Care Systems
- 13.) Health Reform

## **Appendix**

<u>International Profiles of Health Care Systems</u>. 2013. eds. Sarah Thomson, Robin Osborn, David Squires, and Miraya Jun; The Commonwealth Fund, November 2013. <a href="http://www.commonwealthfund.org/Publications/Fund-Reports/2013/Nov/International-Profiles-of-Health-Care-Systems.aspx">http://www.commonwealthfund.org/Publications/Fund-Reports/2013/Nov/International-Profiles-of-Health-Care-Systems.aspx</u>.

Fuchs, Victor R. 2013. "How and Why US Health Care Differs from that in Other OECD Countries." *Journal of the American Medical Association* 309(1): 33-4. <a href="http://jama.jamanetwork.com/article.aspx?articleid=1555142">http://jama.jamanetwork.com/article.aspx?articleid=1555142</a>

### **Summary**

Baicker, Katherine and Amitabh Chandra. 2008. "Myths and Misconceptions about U.S. Health Insurance." *Health Affairs* 27(6): w533-43. http://content.healthaffairs.org.ezpprod1.hul.harvard.edu/content/27/6/w533.full.pdf+html

Rosenthal, Meredith B. 2009. "What Works in Market-Oriented Health Policy?" *New England Journal of Medicine* 360(21): 2157-60. http://www.nejm.org/doi/full/10.1056/NEJMp0903166

Antos, Joseph, John Bertko, Michael Chernew, David Cutler, Dana Goldman, Mark McClellan, Elizabeth McGlynn, Mark Pauly, Leonard Schaeffer, and Stephen Shortell. 2009. "Bending the Curve: Effective Steps to Address Long-Term Healthcare Spending Growth." *American Journal of Managed Care* 15(10): 676-80. <a href="http://www.ajmc.com/journals/issue/2009/2009-10-vol15n10/ajmc">http://www.ajmc.com/journals/issue/2009/2009-10-vol15n10/ajmc</a> 09oct antos reprt676to80

Pauly, M., 2010. "Health Reform without Side Effects." Hoover Institution Press Publication No. 580.

http://www.hoover.org/sites/default/files/uploads/documents/9780817910440\_1.pdf

Patel, Vip and Mark Pauly. 2002. "Guaranteed Renewability and the Problem of Risk Variation in Individual Health Insurance Markets." *Health Affairs*, Jul-Dec: Suppl Web Exclusives: W280-9.

http://content.healthaffairs.org/content/suppl/2003/12/03/hlthaff.w2.280v1.DC1

### **Useful Website**

National Health Expenditures Information:

National Health Expenditures by type of service and source of funds, CY 1960-2014 [ZIP, 102KB] <a href="https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html?redirect=/nationalhealthexpenddata/">https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/index.html?redirect=/nationalhealthexpenddata/</a>