Fall 2016 DUKE UNIVERSITY Department of Economics

#### **Economics 757: Economics of Health**

Social Sciences 105

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Monday 6:15 – 9:00 p.m.

- 1. <u>Course description</u>. This is a PhD level course in the Economics of Health that is also open to qualified second year Economics masters' students. The emphasis will be on acquiring a set of tools and a framework within which to organize empirical analysis. In this course, we will focus on decisions made by household members and the market for health insurance. The course will also have relevance for students interested in broader empirical microeconomic research.
- 2. <u>Prerequisites</u>: A semester of graduate level microeconomics, graduate econometrics, and graduate microeconometrics (recommended).
- 3. <u>Required readings</u>. No textbook, though we do include a non-technical volume that provides contextual background of the issues and literature, and North Holland Handbooks and *JEL* surveys will be useful. Rather, the course consists of 38 required readings, which each student is expected to cover thoroughly, with an eye to content, theory, model, econometric technique, and useful next steps researchers might undertake on the paper's topic.
- 4. <u>Honor code and course policies.</u> Failure to acknowledge assistance on an assignment, or to cite a source of information used in an assignment, or to represent the work of others as your own, constitutes a violation of the University's honor code. Any violations may result in failure of the assignment or the course, or expulsion from the University. Any exam missed for a non-legitimate reason will be accorded the grade of 0. Any exam missed for a legitimate reason will be made up with an oral exam as soon as it can be scheduled by EcoTeach. Late work will be penalized by 1/3 grade point per day late (excluding Sundays). Presentation notes must be posted on Sakai at least 24 hours prior to the class at which the presentation will take place.
- 5. <u>Grading and assignments</u>. The grades will be determined as weighted averages of exams, presentations, and a 15-page research proposal:

Class participation	10%
In-class presentations and supporting notes (2-3 per student)	
Research proposal	25%
Midterm examination	20%
Final examination	25%

To enhance the efficiency of class **presentations**, each presenter is expected to prepare a handout for distribution to the entire class. The handout should contain pertinent aspects of the formal presentation

to avoid having to write out lots of equations in class. Even if you are not a presenter, you are expected to have read the article in detail before class. Presenters should focus on making critical analytical comments and explaining difficult parts rather than covering the paper exhaustively.

At times, we will provide brief background lectures on related literature. Papers most likely to be covered are noted below (at the end of each section, and in smaller font).

Our intention is to provoke discussion, and for the presenter to discuss new techniques, modeling approaches, data sets, and findings, as well as to discuss shortcomings and possible extensions. At times, we will help by providing general background notes from earlier readings that can be incorporated, so that the presenters can emphasize critical points rather than slowly going through the model (and spending lots of time writing it up).

## 6. <u>Course readings</u>

## I. DEMAND FOR MEDICAL CARE

[1] Grossman, M. 1972, "On the concept of health capital and the demand for health," *Journal of Political Economy* **82**: 233-255. August 29

[2] 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**: 251-277. August 29

[3] Finkelstein, Amy, Sarah Taubman, Bill Wright, Mira Bernstein, Jonathan Gruber, Joseph Newhouse, Heidi Allen, Katherine Baicker, and Oregon Health Study Group, 2012, "The Oregon health insurance experiment: evidence from the first year," *Quarterly Journal of Economics* **127**: 1057-1106. August 29

[4] Viscusi, K. and W. Evans. 1990. "Utility functions that depend on health status: Estimates and economic implications," *American Economic Review* **80**: 353-374. September 5

[5] Cohen, Jessica and Pascaline Dupas, 2010 (February), "Free distribution or cost-sharing? Evidence from a randomized malaria prevention experiment," *Quarterly Journal of Economics* **125**(1): 1-45. September 5

## II. HEALTH PRODUCTION

[6] Delavande, Adeline, and Hans-Peter Kohler, 2016, "HIV/AIDS-related Expectations and Risky Sexual Behaviour in Malawi," *Review of Economic Studies* 83 (1): 118-164 September 5

[7] Bailey, Martha J. and Andrew Goodman-Bacon. 2015. "The War on Poverty's Experiment in Public Medicine: Community Health Centers and the Mortality of Older Americans." *American Economic Review*, 105(3): 1067-1104. September 12

[8] Currie, Janet, 2011 "Inequality at birth: some causes and consequences," *American Economic Review* **101**(3): 1-22. September 12

[9] Almond, Douglas, Joseph Doyle, Jr., Amanda Kowalski, and Heidi Williams, 2010 (May), "Estimating marginal returns to medical care: evidence from at-risk newborns," *Quarterly Journal of Economics* **125**(2): 591-634. Also: follow up debate, 2011, *Quarterly Journal of Economics*. **126**:2125-2131 **September 12** 

[10] Aizer, Anna, Shari Eli, Joseph Ferrie, and Adriana Lleras-Muney, 2016. "The Long-Run Impact of Cash Transfers to Poor Families," *American Economic Review.* **106** (4): 935-971. **September 19** 

[11] Hoynes, Hillary, Diane Schanzenbach, and Douglas Almond, 2016. "Long-Run Impacts of Childhood Access to the Safety Net," **106** (4): 903-934. **September 19** 

[12] Cesarini, David, Erik Lindqvist, Robert Ostling, and Bjorn Wallace. 2016. "Wealth, health, and child development: Evidence from administrative data on Swedish lottery players," *Quarterly Journal of Economics* **131** (2): 687-738. September **19** 

[13] Heckman, James, Rodrigo Pinto, and Peter Savelyev, 2013, "Understanding the mechanisms through which an influential early childhood program boosted adult outcomes," *American Economic Review* **103**(6): 2052-2086. **September 26** 

[14] Ashraf, Nava, James Berry, and Jesse Shapiro (2010), "Can higher prices stimulate product use? Evidence from a field experiment in Zambia," *American Economic Review* **100**: 2382-2413. **September 26** 

[15] Einav, Liran, Amy Finkelstein, and Heidi Williams, 2016. "Paying on the Margin for Medical Care: Evidence from Breast Cancer Treatments." *American Economic Journal-Economic Policy* 8 (1): 52-79. September 26

## III. HEALTH INSURANCE

[16] Finkelstein, Amy, Erzo F. P. Luttmer, and Matthew J. Notowidigdo, 2009, "Approaches to estimating the health state dependence of the utility function." *American Economic Review*, **99**(2): 116–21. **October 3** 

[17] Fang, Hanming, Michael Keane, and Dan Silverman, 2008, "Sources of advantageous selection: evidence from the Medigap insurance market," *Journal of Political Economy* **116**(2): 303-350. **October 3** 

[18] Dafny, Leemore, Kate Ho, and Mauricio Varela, 2013. "Let them have choice: gains from shifting away from employer-sponsored health insurance and toward an individual exchange," *American Economic Journal: Economic Policy* 5(1): 32-58. October 3

[19] Ho, Kate and Ariel Pakes, 2014. "Hospital Choices, Hospital Prices, and Financial Incentives to Physicians," *American Economic Review*. 104 (12): 3841-3884. October 3

### October 10 Fall Break

#### MIDTERM EXAMINATION (TAKE-HOME) OCT 3-14 DUE IN ON DROPBOX MIDNIGHT OCT 14

[20] Bundorf, M. Kate, Jonathan Levin, and Neale Mahoney, 2012, "Pricing and welfare in health plan choice," *American Economic Review* **102**(7): 3214-3248. October 17

[21] Vera-Hernandez, Marcos. 2003. "Structural Estimation of a Principal Agent Model: Moral Hazard in Medical Insurance," Rand Journal of Economics, **34**(4), pp. 670-693. **October 17** 

[22] Bajari, Patrick, Christina Dalton, Han Hong, and Ahmed Khwaja, 2014, "Moral Hazard, Adverse Selection, and Health Expenditures: A Semiparametric Analysis," RAND Journal of Economics, 45(4): 747-763. October 17

[23] Einav, Liran, Amy Finkelstein, Stephen Ryan, Paul Schrimpf, and Mark Cullen, 2013, "Selection on moral hazard in health insurance," *American Economic Review* **103**(1): 178-219. **October 24** 

[24] Handel, Benjamin R. and Jonathan Kolstad, 2015. "Health Insurance for 'Humans': Information Frictions, Plan Choice, and Consumer Welfare," American Economic Review, 105 (8): 2449-2500. October 24

[25] Card, David, Carlos Dobkin, and Nicole Maestas, 2009, "Does Medicare save lives?" *Quarterly Journal of Economics* **124**(2): 597-636. October 24

[26] Garthwaite, Craig, Tal Gross, and Matthew Notowidigdo, 2014, "Public health insurance, labor supply, and employment lock," *Quarterly Journal of Economics* **129**(2): 653-696. **October 31** 

[27] Gertler, Paul and Jonathan Gruber. 2002. "Insuring consumption against illness," *American Economic Review* **92**(1): March 2002, 51-70. **October 31** 

[28] Finkelstein, Amy, 2007, "The aggregate effects of health insurance: evidence from the introduction of Medicare," *Quarterly Journal of Economics* **122**(1): 1-37. **October 31** 

[29] Philipson, T. J., and G. S. Becker, 1998, "Longevity and Mortality-Contingent Claims, *Journal of Political Economy*, 106(3): 551-73. November 7

[30] Brown, Jason, M. Duggan, I. Kuziemko, and W. Woolston, 2014, "How does risk selection respond to risk adjustment? New evidence from the Medicare Advantage Program," *American Economic Review* **104**(10): 3335-3364. November **7** 

[31] Baicker, Katherine, Sendhil Mullainathan, and Joshua Schwartzstein, 2015, "Behavioral hazard in health insurance," *Quarterly Journal of Economics*, 1623-1667. November 7

[32] De Nardi, Mariacristina, Eric French, and John B. Jones, 2010. "Why do the Elderly Save? The Role of Medical Expenses," Journal of Political Economy, **118** (1): 39-75. **November 14** 

[33] Miller, Grant, Diana Pinto, and Marcos Vera-Hernandez, 2013, "Risk protection, service use, and health outcomes under Colombia's health insurance program for the poor," *American Economic Journal:* 

## Applied Economics 5(4): 61-91. November 14

## IV. ADDICTION

[34] Becker, G. S. and K. Murphy. 1988. "A theory of rational addiction." *Journal of Political Economy* **96**, 675-700. November **14** 

[35] Gruber, J. and B. Koszegi. 2001. "Is addiction "rational"? Theory and evidence," *Quarterly Journal* of *Economics* **116**(4): 1264-1303. November **21** 

[36] Wang, Yang. 2014. "Dynamic Implications of Subjective Expectations: Evidence from Adult Smokers." *American Economic Journal: Applied Economics*, **6**(1): 1-37. November **21** 

## V. THE GREAT TRANSITIONS, PATTERNS OF HEALTH, AND THE IMPACT OF NUTRITION

[37] Dow, William, Tomas Philipson, and Xavier Sala-i-Martin, 1999, "Longevity complementarities under competing risks," *American Economic Review* **89**(5): 1358-1371.November **21** 

[38] Galiani, Sebastian, Paul Gertler, and Ernesto Schargrodsky, 2005, "Water for life: the impact of privatization of water services on child mortality," *Journal of Political Economy* **113**(1): 83-120. November **28** 

[39] Bell, Clive, Shantayanan Devarajan, and Hans Gersbach, 2006, "The long-run economic costs of AIDS: a model with an application to South Africa," *World Bank Economic Review* **20**(1): 55-89. November **28** 

## VI. HEALTH & ECONOMIC GROWTH AND DEVELOPMENT

[40] Acemoglu, Daron and Simon Johnson, 2007 (December), "Disease and development: the effect of life expectancy on economic growth," *Journal of Political Economy* **115**(6): 925-985. November **28** 

[41] Hall, Robert and Charles Jones, 2007, "The value of life and the rise in health spending," *Quarterly Journal of Economics* **122**(1): 39-72. **November 28** 

[42] Becker, Gary, Tomas Philipson, and Rodrigo Soares, 2005, "The quantity and quality of life and the evolution of world inequality," *American Economic Review* **95**(1): 277-291. November **28** 

# **RESEARCH PROPOSAL DUE MONDAY DECEMBER 12, MIDNIGHT FINAL EXAMINATION (TAKE-HOME) DUE SATURDAY DECEMBER 17, 10:00** P.M.