

ECO369Y1Y: 2013-2014  
HEALTH ECONOMICS

Instructor: Alfia Karimova  
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Office: GE351  
Office hours: TBA

Lectures: Monday 11-1pm, Wednesday 11am  
Location: TBA

### Course Description

Health economics is an extensive and growing field of applied microeconomics. It is the study of determinants of health and allocation of resources within the health system. The objective of the course is to introduce students to the field of health economics by providing an overview of the major topics, with some emphasis on Canadian content. Students will learn how to use economic tools to study questions in health economics, and how to address issues that arise in empirical analysis of these questions. Subjects range from fundamental topics, such as insurance and demand for health, to more recent developments, such as child health and economics of obesity. Course material requires some knowledge of econometrics, but relevant concepts will be covered in class.

### Prerequisites

1. one of microeconomics: ECO200Y1/ECO204Y1/ECO206Y1
2. one of quantitative methods for economics: ECO220Y1/ECO227Y1  
or one of statistics: (STA220H1,STA255H1)/(STA257H1,STA261H1)

### Textbooks

1. Hurley, J. E. (2010). *Health Economics*, 1st edition. McGraw-Hill Ryerson Higher Education.
2. Sloan, F.A., & Hsieh C.-R. (2012). *Health Economics*. The MIT Press.

- Lecture slides and any additional course material will be posted on Blackboard.

### Grading

Course grade is based on the following:

1. Term test 1 (October 14, 2013) - 25%
2. Term test 2 (November 25, 2013) - 25%
3. Project (March 12, 2014) - 25%
4. Final exam (TBA) - 25%

**Email policy**

Students should use school email for all course email correspondence, with the course number (ECO369) in the subject line. Please note that I will not answer questions which are more suitable for discussion in class, office hours, or whose answers can be found in the syllabus or the lecture notes.

**Missed test**

Students who miss a term test should inform me via email, with the subject line “ECO369 - missed test”, preferably prior to the test. The email should contain the student’s name, student number, and the reason for missing the test. Medical notes, if applicable, must be submitted no later than one week after the missed test.

If a student misses a term test, a cumulative make-up test will be given within one week of term test 2. If a student misses term test 1 or term test 2, the make-up test will account for 25% of the final grade. If a student misses both term tests, the make-up test will account for 50% of the final grade. No accommodation will be provided for missing the make-up test, and a grade of zero will be assigned.

I will accept a medical note only if it satisfies the criteria below:

- the note is a fully completed University of Toronto Medical Certificate
- the note is from the day of the test
- the note is original (not a photocopy and not scanned)
- the note is completed by a qualified medical doctor (e.g., not an acupuncturist, chiropractor, or other health care professional)
- the note contains doctor’s OHIP registration number

**Request for re-marking**

If a student believes a piece of work has not been graded correctly, the student may submit a request for re-marking no later than two weeks after the work is returned to the student. The request should explicitly state why the student believes more marks should be allocated, making direct references to the grading scheme. Please note that I will not accept a request for re-marking of a test written in pencil. In addition, keep in mind that the entire piece of work will be re-marked, therefore it is possible that the resulting overall grade may decrease relative to the original grade.

**Late penalty for the project**

The project is due on March 12, 2014, at the beginning of class. A project submitted after 11am on March 12 is considered one day late. Late penalty is 10% per day, for a maximum penalty of 50%. A project submitted after 11am on March 17 will not be accepted, with a grade of 0 assigned for the project. Further details about the project will be provided later in the course.

**Wednesday class**

Wednesday time slot may not be used every week. It is reserved for covering relevant concepts in econometrics, review of test material and practice questions, and discussion of the term project.

## Planned Coverage <sup>1</sup>

### 1. Introduction

- Hurley: Ch. 1
- Sloan & Hsieh: Ch. 1 sections 1 & 2 (pp. 1-10)

### 2. Efficiency & equity

- Hurley: Ch. 2, including the appendix
- Sloan & Hsieh: Ch. 1 sections 3 & 4 (pp. 10-20)

### 3. Economic evaluation

- Hurley: Ch. 4, including the appendix
- Sloan & Hsieh: Ch. 14 & 15

### 4. Health production

- Hurley: Ch. 5, sections 1, 2 & the appendix (pp. 132-146, 155-163)
- Sloan & Hsieh: Ch. 2 sections 1-3 (pp. 39-64)
- Grossman, M. 1972. “On the Concept of Health Capital and the Demand for Health.” *Journal of Political Economy* 80: 223-55.
- Lindahl, Mikael. “Estimating the effect of income on health and mortality using lottery prizes as an exogenous source of variation in income.” *Journal of Human Resources* 40.1 (2005): 144-168.

### 5. Demand for medical care

- Hurley: Ch. 7, including the appendix, & Ch. 8, including the appendix
- Sloan & Hsieh: Ch. 3
- Manning, Willard G., et al. “Health insurance and the demand for medical care: evidence from a randomized experiment.” *The American Economic Review* (1987): 251-277.

### 6. Health insurance

- Hurley: Ch. 9, excluding the appendix, & Ch. 10, including the appendix
- Sloan & Hsieh: Ch. 4 & Ch. 10 sections 1-3 (pp. 418-445)
- Finkelstein, A. 2007. “The Aggregate Effects of Health Insurance: Evidence from the Introduction of Medicare.” *Quarterly Journal of Economics* 122: 1-37.
- Stabile, Mark. “Private insurance subsidies and public health care markets: evidence from Canada.” *Canadian Journal of Economics* (2001): 921-942.

### 7. Physician services

- Hurley: Ch. 13, including the appendix, & Ch. 12, sections 1- 3 (pp. 303-316)
- Sloan & Hsieh: Ch. 5
- Devlin, Rose Anne and Sisira Sarma. 2008. “Do Physician Remuneration Schemes Matter? The Case of Canadian Family Physicians.” *Journal of Health Economics*, 27(5), 1168-81.
- Gruber J., and Owings M. 1996. “Physician financial incentives and cesarean section delivery.” *Rand Journal of Economics*, Spring 27:99- 123.

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<sup>1</sup>\*Disclaimer: Deviations from the reading list may be made throughout the course. However, the topics outlined in this section should give a good idea of the kind of content that will be covered.

## 8. Hospitals

- Hurley: Ch. 14, excluding the appendix (pp. 303-316)
- Sloan & Hsieh: Ch. 6 sections 1-3 (pp. 219-245)
- Harris, J. 1977. “The Internal Organization of Hospitals: Some Economic Implications.” *Bell Journal of Economics* 8: 467-482.
- Newhouse, Joseph P. “Toward a theory of nonprofit institutions: An economic model of a hospital.” *The American Economic Review* 60.1 (1970): 64-74.
- Pauly, Mark, and Michael Redisch. “The not-for-profit hospital as a physicians’ cooperative.” *The American Economic Review* 63.1 (1973): 87-99.

## 9. Prescription drugs

- Hurley: Ch. 15, including the appendix
- Sloan & Hsieh: Ch. 9
- Danzon, Patricia M., and Li-Wei Chao. “Cross-national price differences for pharmaceuticals: how large, and why?” *Journal of Health Economics* 19.2 (2000): 159-195.
- Acemoglu, Daron, and Joshua Linn. “Market size in innovation: theory and evidence from the pharmaceutical industry.” *The Quarterly Journal of Economics* 119.3 (2004): 1049-1090.

## 10. Healthcare systems

- Sloan & Hsieh: Ch. 11, Ch. 12 sections 1-3 & 5 (pp. 503 - 514, 516 - 536)

## 11. Public health

- Hurley: Ch. 6
- Cutler, David, and Grant Miller. “The role of public health improvements in health advances: the twentieth-century United States.” *Demography* 42.1 (2005): 1-22.

## 12. Child health

- Almond, Douglas V. (2006). “Is the 1918 Influenza Pandemic Over? Long-term Effects of In Utero Influenza in the Post-1940 U.S. Population, *Journal of Political Economy* 114(4): 672-712.
- Baker, Michael, and Kevin Milligan. “Maternal employment, breastfeeding, and health: Evidence from maternity leave mandates.” *Journal of Health Economics* 27.4 (2008): 871-887.
- Chou, Shin-Yi, et al. “Parental education and child health: evidence from a natural experiment in Taiwan”. No. w13466. National Bureau of Economic Research, 2007.
- Conti, Gabriella, and James J. Heckman. “The developmental approach to child and adult health.” *Pediatrics* 131. Supplement 2 (2013): S133-S141.
- Miguel, Edward and Michael Kremer (2004). “Worms: Identifying Impacts on Education and Health in the Presence of Treatment Externalities, *Econometrica* 72(1), 159-217
- Rosenzweig, M.R. and T.P. Schultz. 1983. “Estimating a Household Production Function: Heterogeneity, the Demand for Health Inputs, and Their Effects on Birth Weight.” *Journal of Political Economy* 91: 723-746.

## 13. Economics of tobacco and alcohol consumption

- Auld, M.C. (2005) “Causal effect of early initiation on adolescent smoking patterns.” *Canadian Journal of Economics* 38(3):709-34.
- Becker, Gary S., and Kevin M. Murphy. “A theory of rational addiction.” *The Journal of Political Economy* (1988): 675-700.
- Ruhm, Christopher J. “Alcohol policies and highway vehicle fatalities.” *Journal of Health Economics* 15.4 (1996): 435-454.

- Volpp, Kevin G., et al. “A randomized, controlled trial of financial incentives for smoking cessation.” *New England Journal of Medicine* 360.7 (2009): 699-709.

#### 14. Economics of obesity

- Bassett, Mary T., et al. “Purchasing behavior and calorie information at fast-food chains in New York City, 2007.” *American Journal of Public Health* 98.8 (2008): 1457-1459.
- Cutler, David, Edward Glaeser, and Jesse Shapiro. “Why have Americans become more obese?.” No. w9446. National Bureau of Economic Research, 2003.
- Lakdawalla, D. and T. Philipson. 2002. “The Growth of Obesity and Technological Change: A Theoretical and Empirical Examination.” NBER Working Paper w8946.