

Health Economics

Spring 2020

COURSE OVERVIEW:

Primary objective of this course is to build an understanding of economics of the health care delivery, using basic knowledge in economic theory and empirical evidence based on the framework of these theoretical models. Particular attention will be devoted to Economic Theory, Industrial Organization and Health policy. It starts with a discussion of supply and demand of health and health care delivery. It then introduces the role of asymmetric information in the market for health insurance leading to adverse selection and moral hazard. It further introduces the concepts used to assess the health technology. It then moves on to discuss the range of policies, such as nationalized health care and social health insurance, available to different countries to solve the problems that arise in both the health care and health insurance markets. In the end, it will focus on the economics of health externalities. This course should work as a foundation for the students who want to pursue Health Economics as a field in graduate or doctoral studies. The pedagogy will be through a combination of lecture sessions on conceptual areas, discussions of related research papers, and regular assignments/quizzes. The students are expected to complete the assigned readings to participate in the discussion sessions. The following list of topics and selected readings should give an idea about topics that we expect to cover in class. However, it may change depending on the progress of the students, their ability to learn the subject, and if any specific needs required to be addressed.

TOPICS & READINGS:

1. Demand for health and health care delivery

- Demand for health care delivery
- Price elasticity
- The Grossman model – Human capital model of the demand for health
- The efficient producer hypothesis
- The thrifty phenotype hypothesis
- The direct income hypothesis
- The allostatic load hypothesis
- The productive time hypothesis
- The Fuchs hypothesis

2. Supply of health care

- Differentiated product oligopoly
- Price competition

- Hospital competition and patient outcomes

3. Asymmetric information in the Health Insurance Market

- Demand for Insurance
- Akerlof's market for lemons
- The adverse selection death spiral
- The Rothschild–Stiglitz model
- Moral Hazard in the insurance market

4. Assessment of Health Technology

- Cost-effectiveness analysis
- The cost-effectiveness frontier
- Cost–benefit analysis

5. Health Policy

- Arrow's Impossibility theorem
- The health policy trilemma
- The Beveridge model: nationalized health care
- The Bismarck model: social health insurance
- Population aging and the future of health policy

6. Public Health

- Externalities in health
- Pigouvian subsidies and taxes
- The Coase theorem
- Economic epidemiology
- Artificial Intelligence for Public Health

RECOMMENDED BOOKS:

1. Bhattacharya, J., Hyde, T., & Tu, P. (2013). *Health economics*. Macmillan International Higher Education. – Mandatory Text.
2. Angrist, J. D., & Pischke, J. S. (2008). *Mostly harmless econometrics: An empiricist's companion*. Princeton university press.

ASSESSMENT SCHEME:

Class Participation: 5%
Class Assignment and Quizzes: 15%
Presentation: 20%
Midterm Exam: 10%
Final Exam: 50%

CLASS PRESENTATIONS:

Each class presentation will be of 40 minutes duration (including Q&A). Students will have to choose papers from the reading list given below, and prepare their presentations accordingly. Each student will have to prepare two such presentations over the semester either using Microsoft PowerPoint or Latex. Students are expected to cover the following aspects of a particular research paper during the presentation:

- What is the main research question?
- Why is the research question important?
- What is the source of the data?
- What is the identification strategy or the experimental design?
- What are the main findings?
- What are the policy implications (if any)?

GRADING POLICY:

Anyone found guilty of plagiarism either in assignments, quizzes or exams, will get a fail grade.

SELECTED READINGS FROM JOURNALS FOR PRESENTATION:

1. Card, D., Dobkin, C., & Maestas, N. (2009). Does Medicare save lives?. *The quarterly journal of economics*, 124(2), 597-636.
2. Doyle Jr, J. J. (2005). Health insurance, treatment and outcomes: using auto accidents as health shocks. *Review of Economics and Statistics*, 87(2), 256-270.
3. Finkelstein, A., Taubman, S., Wright, B., Bernstein, M., Gruber, J., Newhouse, J. P., ... & Oregon Health Study Group. (2012). The Oregon health insurance experiment: evidence from the first year. *The Quarterly journal of economics*, 127(3), 1057-1106.
4. Wherry, L. R., & Meyer, B. D. (2016). Saving teens: using a policy discontinuity to estimate the effects of Medicaid eligibility. *Journal of Human Resources*, 51(3), 556-588.
5. Almond, D. (2006). Is the 1918 influenza pandemic over? Long-term effects of in utero influenza exposure in the post-1940 US population. *Journal of political Economy*, 114(4), 672-712.
6. Maccini, S., & Yang, D. (2009). Under the weather: Health, schooling, and economic consequences of early-life rainfall. *American Economic Review*, 99(3), 1006-26.
7. Chen, Y., & Zhou, L. A. (2007). The long-term health and economic consequences of the 1959–1961 famine in China. *Journal of health economics*, 26(4), 659-681.
8. Almond, D., & Mazumder, B. (2011). Health capital and the prenatal environment: the effect of Ramadan observance during pregnancy. *American Economic Journal: Applied Economics*, 3(4), 56-85.
9. Currie, J., & Walker, R. (2011). Traffic congestion and infant health: Evidence from E-ZPass. *American Economic Journal: Applied Economics*, 3(1), 65-90.
10. Hoynes, H., Schanzenbach, D. W., & Almond, D. (2016). Long-run impacts of childhood access to the safety net. *American Economic Review*, 106(4), 903-34.
11. Black, S. E., Devereux, P. J., & Salvanes, K. G. (2007). From the cradle to the labor market? The effect of birth weight on adult outcomes. *The Quarterly Journal of Economics*, 122(1), 409-439.
12. Lee, C. (2014). In utero exposure to the Korean War and its long-term effects on socioeconomic and health outcomes. *Journal of health economics*, 33, 76-93.
13. Das, J., Holla, A., Mohpal, A., & Muralidharan, K. (2016). Quality and Accountability in Health Care delivery: audit-study evidence from primary care in India. *American Economic Review*, 106(12), 3765-99.
14. Rosales-Rueda, M. (2018). The impact of early life shocks on human capital formation: Evidence from El Niño floods in Ecuador. *Journal of health economics*, 62, 13-44.