ECON 374: Health Economics

Prof. Moon Joon Kim

Spring 2024 George Mason University Korea

E-mail: mkim238@gmu.edu Phone: (+82) 32-626-5127

Class Room: G202 Class Hours: M/W 9:00-10:15am

Office: G653 Office Hours: M 12:00-1:45pm or by appointment

Course Description

This course provides an introduction to health economics. We will examine the mechanisms of health care systems globally and the determinants that influence individual and community health. Starting with foundational principles of health economics, we will progress to advanced subjects such as the role of information and behavioral factors in health care decisions. Key areas of focus will include the production, distribution, and organization of health care services, the dynamics of health care market structures, the factors driving demand for health services, pricing considerations, and the financial underpinnings of health care systems.

Student Learning Outcomes

Upon successful completion of this course, students will be able to:

- Recognize and employ essential economic concepts and analytical methodologies to dissect human economic behaviors.
- Implement microeconomic theories to critically assess primary challenges and dynamics within the health care sector.
- Articulate significant institutional and market-driven factors influencing the motivations of primary stakeholders in health care markets.
- Comprehend the depth, scope, and constraints of economic analysis when applied to health care scenarios.
- Acquire a nuanced economic perspective on the historical progression of pivotal health policy topics.
- Enhance analytical reasoning by evaluating and drawing insights from research articles in the domain.

Required Text

Jay Bhattacharya, Timothy Hyde, Peter Tu (BHT), *Health Economics*, 2013, 1st edition, Red Globe Press

Optional Text

For those looking for additional textbooks to supplement the main topics or for more in-depth coverage to areas you might be interested in pursuing, you may wish to read:

- Frank A. Sloan and Chee-Ruey Hsieh, Health Economics, 2nd Edition, 2017, MIT Press
- Frank A. Sloan and Hirschel Kasper, *Incentives and Choice in Health Care*, 2008
- Jonathan Gruber, Health Care Reform: What It Is, Why It's Necessary, How It Works, 2012

Prerequisites

ECON 103 and ECON 104 or permission of instructor

Course Structure

This course will be taught through a combination of assigned readings, lecture, course project, and examinations. Class interaction allows the students to discover the strengths and weaknesses of alternative policy recommendations.

Assigned Readings

Textbook and other assigned readings present relevant topics, which will be covered more depthfully in class lecture. In class discussion of readings, instructor highlights most relevant reading topics and shows by example how to present data in a stimulating way, consistent with achieving course objectives.

Lecture

Lectures will be highly interactive. Instructor prompts students for response to questions posed and solicits his/her thoughts on issues discussed. Additionally, instructor provides concrete, real–world examples to illustrate concepts. Lecture format reinforces by example appropriate methods for asking questions, gaining relevant insights, and making appropriate recommendations.

Quizzes

To foster continuous engagement with the course content, two quizzes will be scheduled during the semester: one prior to the midterm and another before the final exam. These quizzes serve to encourage students to keep up with their readings and help ensure retention of key information. Each quiz will comprise approximately three to five questions. It should be noted that questions which are frequently answered incorrectly might be included again in future exams to reinforce learning.

Exams

Exams will be closed-book and be composed of true/false questions, multiple choice, essay questions, some calculations that test students' ability to apply concepts discussed through the exam date. Cheating and plagiarism will not be tolerated. Any violation of the Institute's Honor Code will be reported to the Dean of Students Office. Non–programmable calculators are allowed. You are not allowed to use smartphones and tablets as calculators. Hence, please don't forget to bring your regular calculator on exam days.

Course project: Research writing competition (Open divisions)

Students are required to submit a term paper to the GMUK Research Writing Competition (typically scheduled in late April) that articulates a research question, describes the contribution to the literature, outlines the data to be used, and proposes an empirical strategy. Preliminary results are not necessary, but add to the strength of the proposal. In weeks 2-3, students will give a brief 5–10 minute presentation on the idea. In weeks 6-9 students will deliver a research pitch in the form of an 'egg-timer': a 3 minute pitch of your idea. Extra credits will be awarded based on rank (1st place: +10pt; 2nd place: +5pt; 3rd place and DEI award: +3pt; Finalists: +1pt)

Grading Policy

Students will be evaluated on the basis of problem sets, exams, course project, and attendance. These components will be weighted as follows:

- 20% Midterm exam
- 30% Final exam (comprehensive)
- 10% Two quizzes (5% each)
- 20% Course project and presentation
- 20% Attendance (-1% for each unexcused absence; -1% for lateness)

Based on the cumulative grade, final grade will be specified as:

A+ = 97% and higher; A = 94% and higher; A- = 90% and higher; B+ = 87% and higher; B = 84% and higher; B- = 80% and higher; C+ = 77% and higher; C = 74% and higher; C- = 70% and higher; D = 60% and higher; F= below 60%

Course Policies

Class Attendance

Students are expected to engage in active classroom discussion, thus class participation and attendance are mandatory. This includes submitting assignments, leading discussions and participate classroom debates.

Email

GMU faculty and students are required to use GMU email accounts to communicate. You must regularly check your GMU email address, as important updates will be sent that way. Emails that I send to our class will also be posted as Blackboard announcements which you can view on the "Home Page" of our course Blackboard.

Electronics

All electronic devices, including laptops, tablets, cell/smartphones, earbuds, etc., will be **strictly** prohibited in class. This is because they undermine the user's ability to learn effectively as well as those nearby the user. However, students will be permitted to use their laptops for presentations.

Policy on Make-up Work

Students are allowed to make up work only for medical reasons (a doctor's note required), consistent with GMU Korea policy. You must notify the instructor in advance if you are expected to miss an exam or presentation.

University Policies and Resources

Academic Integrity

George Mason University has an Honor Code with clear guidelines regarding academic integrity. Please see http://honorcode.gmu.edu/ to ensure that you abide by it. If you are uncertain about citation rules or assignment guidelines, ask me for clarification. No grade is important enough to justify academic misconduct. If you feel unusual pressure or anxiety about your grade in this or any other course, please let me know and also seek help from University resources.

Academic Resource Center

The Academic Resource Center offers tutoring and workshops to support your academic progress. To discuss academic support resource available to you, please contact Eunmee Lee, Ph.D., Director of the Academic Resource Center at elee45@gmu.edu. (https://masonkorea.gmu.edu/resources-andservices/academic-resource-center)

Counseling and Wellness

Counseling and Wellness aims to provide comprehensive support services that promote the personal, social, and academic success of George Mason University Korea students. (https://masonkorea.gmu.edu/resources-and-services/counseling-and-wellness

Disability Services

Disability Services at George Mason University is committed to providing equitable access to learning opportunities for all students. If you are seeking accommodations for this class, please visit the Disability Services office (https://masonkorea.gmu.edu/resources-and-services/disability-services/disabil

Course Modality

The Korean Ministry of Education's recommendation that higher education instruction be conducted in person this semester reaffirms Mason Korea's instructional modality. This course has been designed for in person instruction and learning. Course sessions will not be recorded to fully engage in an interactive learning environment. This course will follow all policies and guidance set by Mason Korea. Should any class sessions need to be adjusted or canceled due to health and safety concerns, students will be notified by email and can continue to check Blackboard for course materials and updates.

Classroom precautions during/after COVID-19

Although it is no longer required to wear a mask inside the Mason Korea building, you are required to wear a mask in the classroom if you have any suspicious symptoms or had a close contact with a confirmed case. If you test positive, please continue to immediately report to MK Emergency, Health and Safety (EHS) using online form or email (mksafety@gmu.edu). There may be some occasions where I may ask you to wear masks. Please take all the recommended precautions to keep our community and yourself safe. MK EHS will supply masks and self-test kits, please visit the office at #545 when necessary. If you have any questions, please contact Mason Korea EHS at mksafety@gmu.edu or 032-626-5013.

Course Schedule

The schedule is tentative and subject to change. I reserve the right to adjust the pace of the course and the content covered as is necessary. Each exam will test on the material that was taught up until 1 week prior to the exam.

Week 01, 02/19 - 02/23: Overview of health economics

- Syllabus overview
- Microeconomics Concepts Review
- Chapter 1. Why Health Economics?

Week 02, 02/26 - 03/01: Demand for health and health care

- Chapter 2. Demand for Health Care
- Chapter 3. Demand for Health: The Grossman Model
- Finkelstein et al. 2012. The Oregon Health Insurance Experiment: Evidence from The First Year, QJE, 127(3): 1057-1106
- Cretin et al. 2006. China Rural Health Insurance Experiment. RAND Health Working Paper
- RAND Health, 40 Years of the RAND Health Insurance Experiment

Supplemental readings

- Bhattacharjya and Sapra, 2008 Health Insurance In China And India: Segmented Roles For Public And Private Financing, Health Affairs, 27(4) 1005-1015
- Card et al. 2009. Does Medicare Save Lives?, QIE, 124(2): 597-636

Week 03, 03/04 - 03/08: Demand for health and health care

- Chapter 4. Socioeconomic Disparities in Health?
- Currie and Stabile. 2003. Socioeconomic Status and Child Health: Why Is the Relationship Stronger for Older Children? AER, 93(5): 1813-1823
- Lleras-Muney, Adriana. 2005. The Relationship between Education and Adult Mortality in the United States. Review of Economic Studies, 72(1):189-221
- Roseboom et al. 2001. Effects of prenatal exposure to the Dutch famine on adult disease in later life: an overview. Molecular and Cellular Endocrinology 185:93–98
- Schulman et al. 1999. The Effect of Race and Sex on Physicians' Recommendation For Cardiac Catheterization. N Engl J Med. 340(8): 618-626b
- *Research proposal presentation (<5-10min)

Supplemental readings

- Marmot et al. 1978. Employment grade and coronary heart disease in British civil servants. Journal of Epidemiology and Community Health, 32: 244-249
- Marmot et al. 1991. Health inequalities among British civil servants: the Whitehall II study. Epidemiology. 337:1387-1393
- Mello et al. 2010. National Costs Of The Medical Liability System. Health Affairs, 9: 1569–1577

Week 04, 03/11 - 03/15: Supply of Health Care

- Chapter 5. The Physician Labor Market
- Landrigan et al. 2004. Effect of Reducing Interns' Work Hours on Serious Medical Errors in Intensive Care Units. N Engl J Med, 351:1838-1848
- *First draft due (1 page)

Week 05, 03/18 - 03/22: Supply of Health Care

- Chapter 6. The Hospital Industry
- Birkmeyer et al. 2002. Hospital Volume and Surgical Mortality in the United States N Engl J Med, 346 (15), 1128-37
- Halm et al. 2002. Is Volume Related to Outcome in Health Care? A Systematic Review and Methodologic Critique of the Literature. Ann Intern Med, 137 (6), 511-20
- McGrath et al. 2000. Relation Between Operator and Hospital Volume and Outcomes Following Percutaneous Coronary Interventions in the Era of the Coronary Stent. JAMA. 284(24):3139-3144

Supplemental readings

 Schuman, John Henning. A Bygone Era: When Bipartisanship Led To Health Care Transformation. NPR. October 2, 2016

Week 06, 03/25 - 03/29: Information Economics

- Chapter 7. Demand for Insurance
- Quiz #1

Supplemental readings

 Gaynor and Town. 2011. Competition in Health Care Markets. Handbook of Health Economics. 2: 499-637

Week 07, 04/01 - 04/05: Information Economics

Chapter 8. Adverse Selection: Akerlof's Market for Lemons

Week 08, 04/08 - 04/12: Spring Recess

- Mon Apr 8-Tue Apr 9: Spring Recess (no classes)
- Wed Apr 10: National Assembly Election (no classes)

Week 09, 04/15 - 04/19: Midterm Week

- Mon Apr 15: **Midterm exam**: Chapters 1–8
- Wed Apr 17: Midterm Review

Week 10, 04/22 - 04/26: Information Economics

- *Second draft due (2 pages)
- Chapter 9.11. Can Markets Solve Adverse Selection?
- Chapter 10. Adverse Selection in Real Markets

Supplemental readings

 Einav and Finkelstein. 2011. Selection in Insurance Markets: Theory and Empirics in Pictures. Journal of Economic Perspectives, 25(1): 115-138

Week 11, 04/29 - 05/03: Information Economics

- Tue Apr 30: Make Up Day 1 (Follow Wednesday Schedule. Tuesday classes do not meet.)
- Wed May 1: Labor Day (no classes)
- Chapter 11. Moral Hazard
- Gladwell, M. The Moral Hazard Myth. The New Yorker, August 29, 2005
- Kliff, S. This study is forcing economists to rethink high-deductible health insurance. Vox, October 14, 2015

Week 12, 05/06 - 05/10: Economics of Health Innovation

- Chapter 14. Health Technology Assessment
- Mon May 6 Children's Day Alternative Holiday (no classes)
- Wed May 8: 3rd draft due (up to 10 pages)

Week 13, 05/13 - 05/17: Public Health Economics

- Wed May 15 Buddha's Birthday (no classes)
- Thu May 16 Make Up Day 2 (Follow Wednesday Schedule. Thursday classes do not meet.)
- Chapter 20. The Economics of Health Externalities
- Quiz #2

Week 14, 05/20 - 05/24: Behavioral Health Economics

• Chapter 21. Economic Epidemiology

Week 15, 05/27 - 05/31: Behavioral Health Economics

• Chapter 23. Prospect Theory

Week 16, 06/03 - 06/07: Behavioral Health Economics

- Mon Jun 3: Last Day of Class: Review Session
- Mon Jun 3: Final draft due (up to 20 pages)

Week 17, 06/10 - 06/14: Final Exam

- Final exam: Wednesday, June 12 9:00am 11:45am
- Comprehensive (Chapters 1–23)
- Venue: Classroom G202