The Chinese University of Hong Kong Department of Economics Term 2, 2024-2025 Instructor: Kevin DEVEREUX

## **HEALTH ECONOMICS**

(ECON5532)

Time and Venue: Thursday 6:30pm-9:15pm ELB LT3

Website: https://blackboard.cuhk.edu.hk

Class handouts (e.g., problem sets and solutions, lecture notes) will be available at the course website.

## **Instructor's Contact Information:**

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Office Hours:	By appointment

# **Course Description:**

In many countries, health care spending grows much faster than GDP. Countries like the Unites States spend about 20 percent of its GDP on health care. As one of the most important "goods", how health care is financed and delivered has large welfare implications. In this course, we will apply methods and reasoning from microeconomics to the health care sector. In particular, we will investigate different aspects of the health care system and assess how various policies affect the functioning of the health care system.

This is a postgraduate level course in health economics. The course is a synthesis of theoretical modelling, empirical testing, and policy analysis. It covers core topics in the field of health economics: demand for health and health care, supply of health care, information economics on health care, equilibrium analyses in the healthcare market, economics of health innovation, health policy, public health economics, and behavioral health economics.

This course will also introduce the application of healthcare big data in economics analyses, and cover topics on the economics of artificial intelligence with the application in health and healthcare.

**Required Background:** Prerequisites include intermediate microeconomics and some knowledge in statistics or econometrics. Also helpful is some experience with statistical computing, such as using STATA.

#### **Readings**:

Text: Battacharya, J., Hyde, T., & Tu, P., Health Economics. Palgrave Macmillan.

Research Papers: Additional (empirical) papers will be made available as the course proceeds.

#### **Course Requirements:**

Students are expected to read assigned readings before class and to attend lectures. Requirements include problem sets, a group project, and a final exam.

## **Course Grading:**

30% 2 Problem Sets

30% Midterm Exam (Lecture 7, 20 February; location: TBA)

40% Final Exam (Lecture 13, 3 April 2025; location: TBA)

The problem sets will be handed out a week before they are due. Late problem sets will not be accepted.

# **Academic Honesty:**

Attention is drawn to University policy and regulations on honesty in academic work to the disciplinary guidelines and procedures applicable to breaches of such policy regulations. Details may be found at <a href="http://www.cuhk.edu.hk/policy/academichonesty/">http://www.cuhk.edu.hk/policy/academichonesty/</a>.

## **TENTATIVE SCHEDULE OF LECTURES**

Lecture 1: Demand for health and healthcare

(Jan 9) Battacharya Chapter 1, 2

Lecture 2: Demand for health and healthcare: the Grossman model

(Jan 16) Battacharya Chapter 3

Lecture 3: The SIR model of epidemic and health inequality

(Jan 23) Battacharya Chapter 4

Lecture 4: Labor market for physicians

(Feb 6) Battacharya Chapter 5

Lecture 5: Delivery of healthcare: the hospital industry

(Feb 13) Battacharya Chapter 6

Lecture 6: Demand for insurance: expected utility

(Feb 20) Battacharya Chapter 7

**Lecture 7:** Midterm Exam (Venue: TBA)

(Feb 27)

Lecture 8: Adverse selection: the Akerlof model

(Mar 13) Battacharya Chapter 8

Lecture 9: Adverse selection: graphical analysis

(Mar 20) Battacharya Chapter 9 (section 11), 10

Einav, L. and A. Finkelstein, "Selection in Insurance Markets: Theory and Empirics in Pictures."

Journal of Economic Perspectives, 2011, 25(1): 115-138.

pp. 433-444 and conclusion: Cutler, D. and Reber, S. "Paying for Health Insurance: The Trade-Off between Competition and Adverse Selection," *Quarterly Journal of Economics*, 1998, 433-466. "New data on sign-ups through ACA's marketplaces should lay "death spiral" claims to rest,"

02/08/17, Brookings article.

Lecture 10: Moral hazard in healthcare demand

(Mar 27) Battacharya Chapter 11

Gladwell, M. "The Moral Hazard Myth," The New Yorker, August 29, 2005.

http://www.newyorker.com/archive/2005/08/29/050829fa fact

http://www.vox.com/2015/10/14/9528441/high-deductible-insurance-kolstad

Lecture 11: Why are healthcare costs so high? Technology growth and innovation

(Apr 3) Battacharya Chapter 12, 13

Lakdawalla, D. et al. "U.S. Pharmaceutical Policy in a Global Marketplace," Health Affairs, 2009.

http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3804349/?report=readerg

Lecture 12: International healthcare systems and alternative designs

(Apr 10) Battacharya Chapter 15

**Lecture 13:** Final Exam (Venue: TBA)

(Apr 17)