ICCE
INSTITUTE OF CERTIFIED CHARTERED ECONOMISTS

HE1

HEALTH ECONOMICS I

PROFESSIONAL LEVEL

SYLLABUS & EXAMS GUIDE

PROFESSIONAL LEVEL

HE1 – HEALTH ECONOMICS I

SYLLABUS & EXAMS GUIDE

OVERVIEW

Health economics is defined by who health economists are, and what they do! Morrisey and Cawley (2008) examined the field of health economics in 2005 and found that almost all (96 percent) held academic doctorate degrees. Nearly three-quarters of those with doctorates received their degrees in economics.

The majority worked in university settings; most others worked for non-profit organizations or in government, mainly the federal government. Health economists held their appointments in economics departments, schools of public health, and in schools of medicine. Many of the leading economics departments—e.g., MIT, Princeton, Berkeley, Harvard—now feature prominent health economists. Health economists draw on various sub-disciplines of training within economics, including labor economics, industrial organization, public finance, cost-benefit analyses, and most generally, microeconomics.

Consider, at this time, that the United States devotes by far the largest share of GDP to health care spending (over one-sixth), and its per capita health care spending (over $9,500) greatly exceeds that of any other country. Most health economists agree that these spending patterns reflect the rapid rate of adoption of new technology in the United States. The United States does not have a very impressive record in terms of broad health outcomes indicators such as life expectancy and infant mortality. Critics of the U.S. health care system often wonder what Americans are getting for their money. Policymakers and health economists seek to determine whether spending on new technology is worth it. Arguably, there is no more important issue.

Consider, for example, a new surgical procedure for a patient with acute myocardial infarction (heart attack). It is not enough to estimate the immediate cost impact of the new procedure and the expected benefit to the patient in terms of short-term survival. By impacting the patient's health for many years, the

new treatment will affect spending well into the future. David Cutler (2007) develops a framework to address these complex interrelationships in "The Lifetime Costs and Benefits of Medical Technology." He analyzes revascularization, a set of surgical procedures such as coronary bypass and angioplasty that restore blood flow. He looks at a group of Medicare patients who have had heart attacks and he tracks them for up to 17 years. Chapter 4 devotes considerable attention to Cutler's work, but here we highlight his conclusion that revascularization costs $33,000 for an extra year of life. Is this worth it? Most would agree that it is!

Health care costs in general, and technology-related costs in particular, are relevant to all countries. Health economics is still a relatively new discipline with an evolving scope and pedagogy, and neither it, nor we, will provide answers to all the health system questions that nations face. Despite this caveat, we cannot think of any field of study that is more relevant to unraveling the meaning of today's headlines, or more pertinent to the lives of individuals.

[Source: The Economics of Health and Health Care, 8th Edition: by Sherman Folland, Allen C. Goodman, Miron Stano, Published by Routledge, 2017]

LEARNING OBJECTIVES

On successful completion of the course, learners should be able to:

- Gain experience and skills needed for a career in research and health service decision-making.
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READING TOPICS

Introduction

- What Is Health Economics?
- The Relevance of Health Economics
- Economic Methods and Examples of Analysis
- Two Notable Contributors to Health Economics
- Does Economics Apply to Health and Health Care?
- Is Health Care Different?

Microeconomic Tools for Health Economics

- Scarcity and the Production Possibilities Frontier
- Practice with Supply and Demand
- Functions and Curves
- Consumer Theory: Ideas behind the Demand Curve
- Individual and Market Demands
- Elasticities
- Production and Market Supply
- The Firm Supply Curve under Perfect Competition
- Monopoly and Other Market Structures

Statistical Tools for Health Economics

- Hypothesis Testing
- Difference of Means
- Regression Analysis
- Multiple Regression Analysis
- Statistical Inference in the Sciences and Social Sciences

Economic Efficiency and Cost-Benefit Analysis

- Economic Efficiency
- Cost-Benefit Analysis: Background
- Measuring Benefits and Costs
- Valuing Human Life
- Cost-Effectiveness Analysis

Production of Health

- The Production Function of Health
- The Historical Role of Medicine and Health Care
- The Production Function of Health in the Modern Day
- Do Other Measures of Health Care Affect Health?
- The Role of Schooling

READING TOPICS

The Production, Cost, and Technology of Health Care

- Production and the Possibilities for Substitution
- Costs in Theory and Practice
- Technical and Allocative Inefficiency
- Technological Changes and Costs
- Diffusion of New Health Care Technologies

Demand for Health Capital

- The Demand for Health
- Labor–Leisure Trade-Offs
- The Investment/Consumption Aspects of Health
- Investment over Time
- The Demand for Health Capital
- Changes in Equilibrium: Age, Wage, and Education
- Empirical Analyses Using Grossman's Model
- Obesity—The Deterioration of Health Capital

Demand and Supply of Health Insurance

- What Is Insurance?
- Risk and Insurance
- The Demand for Insurance
- The Supply of Insurance
- The Case of Moral Hazard
- Health Insurance and the Efficient Allocation of Resources
- Income Transfer Effects of Insurance

Consumer Choice and Demand

- Applying the Standard Budget Constraint Model
- Two Additional Demand Shifters—Time and Coinsurance
- Issues in Measuring Health Care Demand
- Empirical Measurements of Demand Elasticities
- Impacts of Insurance on Aggregate Expenditures
- Other Variables Affecting Demand
- Urban versus Rural

Asymmetric Information and Agency

- Overview of Information Issues
- Asymmetric Information
- Application of the Lemons Principle: Health Insurance
- The Agency Relationship

READING TOPICS

The Organization of Health Insurance Markets

- Loading Costs and the Behavior of Insurance Firms
- Employer Provision of Health Insurance: Who Pays?
- Employer-Based Health Insurance and Labor Supply
- The Market for Insurance
- The Uninsured: An Analytical Framework
- Impacts of the Affordable Care Act on the Uninsured

EXAMINATION GUIDE

EXAMS GUIDE

- You are required to comply in all respects with any instructions issued by the exam proctor before and during an exam.
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EXAM RESULTS

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ADDITIONAL READING PLATFORMS

NEWS PORTALS

- The Economy360
- FI Sense
- The Economist
- Bloomberg Business week
- Harvard Business Review
- Sloan Management Review

JOURNALS

- The Economic Journal
- Quarterly Journal of Economics
- Journal of Financial Economics
- Journal of International Economics
- American Economic Review
- The Review of Economic Studies
- The Journal of Finance
- Journal of Political Economy
- Journal of Accounting and Economics
- The Review of Economics and Statistics
- The Review of Financial Studies
- Quantitative Economics
- Journal of Management Studies
- Journal of Econometrics
- Journal of Banking and Finance

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QUICK LINKS

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- Exams Proctor
- About ICCE Scholarships
- About ICCE Application
- ICCE Fees

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HE2

HEALTH ECONOMICS II

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READING TOPICS

Managed Care

- What Is the Organizational Structure?
- What Are the Economic Characteristics?
- The Emergence of Managed Care Plans
- Development and Growth of Managed Care—Why Did It
- Take So Long?
- Modeling Managed Care
- How Does Managed Care Differ?—Empirical Results

Nonprofit Firms

- An Introduction to Nonprofits
- Why Nonprofits Exist and Why They Are Prevalent in Health Care
- Models of Nonprofit Hospital Behavior
- The Relative Efficiency of Nonprofits versus For-Profits

Hospitals and Long-Term Care

- Background and Overview of Hospitals
- Hospital Utilization and Costs
- Closures, Mergers, and Restructuring
- Quality of Care
- Nursing Homes
- Hospice, Home Health, and Informal Care

The Physician's Practice

- Physician Agency and Supplier-Induced Demand (SID)
- Small Area Variations (SAV)
- Issues that Affect Both SID and SAV

Health Care Labor Markets and Professional Training

- The Demand for and Supply of Health Care Labor
- Factor Productivity and Substitution among Factors
- Health Care Labor Supply and the Meaning of Shortages
- Medical Education Issues and the Question of Control
- Licensure and Monopoly Rents
- Other Physician Labor Issues

The Pharmaceutical Industry

- Structure and Regulation
- The Production of Health and Substitutability

READING TOPICS

- Drug Pricing and Profits
- Research and Development (R&D) and Innovation
- Cost Containment

Equity, Efficiency, and Need

- Efficiency and Competitive Markets
- Deviations from the Competitive Model in the Health Care Sector
- Promoting Competition in the Health Care Sector
- An Economic Efficiency Rationale for Social Health Insurance
- Need and Need-Based Distributions
- Horizontal Equity and Need

Government Intervention in Health Care Markets

- Economic Rationale for Government Intervention
- Forms of Government Intervention
- Government Involvement in Health Care Markets
- Government Failure

Social Insurance

- Social Insurance Policies and Social Programs
- Historical Roots of Social Insurance
- The Affordable Care Act (ACA) of 2010
- Medicare and Medicaid in the United States
- Public Insurance and Health
- The Effects of Medicare and Medicaid

Comparative Health Care Systems

- Contemporary Health Care Systems
- The United Kingdom—The National Health Service
- China—An Emerging System
- The Canadian Health Care System
- Different Systems: The Public's Evaluation
- Differences in Health Care Spending across Countries

Health System Reform

- Goals of Reform
- Ensuring Access to Care
- Quality of Care
- The Affordable Care Act (ACA) of 2010

READING TOPICS

- Competitive Strategies in the Post-ACA Era
- ACA Outcomes after Six Years
- Meeting Reform Goals

The Health Economics of Bads

- An Introduction to Bads
- Models of Addiction
- Rationales for Public Intervention
- Advertising Restrictions on Cigarettes and Alcohol
- Excise Taxes and Consumption of Cigarettes and Alcohol

The Economics of Social Capital and Health

- What Is Social Capital?
- How Do People Choose Social Capital?
- Empirical Tests of Social Capital and Health
- Pursuing Causality
- Elements of Trust
- Social Capital and Risky Choices

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