# uc3m Universidad Carlos III de Madrid

### Global Health

Academic Year: (2019 / 2020) Review date: 25-04-2020

Department assigned to the subject: Economics Department

Coordinating teacher: CARDOSO-MARTA PINTO-MACHADO, MATILDE

Type: Electives ECTS Credits: 6.0

Year: Semester:

## REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Principles of Economics, Statistics I, Statistics II, Microeconomics

#### **OBJECTIVES**

Be able to apply scientific method to the economic, social and political questions of a global society; be able to formulate problems in this context, identify a possible explication or solution, and a method to contrast them by sensibly interpreting the data.

Be able to formulate and solve basic economic, social, political problems in an international context.

Be able to carry out case studies and apply comparative method to analyze institutions, processes and policies in different countries.

### LEARNING OUTCOMES

- · Knowledge of the main indicators and sources of data on global health and understanding of the evolution of these indicators worldwide.
- · Understanding of the major global health risks and knowledge of the discussions on global health from an interdisciplinary perspective.
- · Understanding the relationship between health and poverty and social inequality and health, as well as the main obstacles and major strategies for improving health in developing countries and to reduce social inequalities in access to health.
- · Knowledge of the main existing health systems in the world, discussions about its effectiveness, efficiency and sustainability.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

Economic, geographic, social and demographic factors on the distribution of disease and death worldwide. Evolution over time. Main indicators of health measurement and databases. The relationship between health and poverty, and inequality and poverty. Major existing health systems in the world: origin, impact, efficiency and sustainability. The political economy of health systems. Health and global economic policies and their impact on global health: case studies (AIDS, malaria, child mortality, adjustment policies, policies for the protection of pharmaceutical patents). Major global health risks and prevention policies.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

## PART 1. INTRODUCTION TO HEALTH ECONOMICS

- 1. Introduction: Why is Health Economics Important? [Stiglitz, chp 12., The Economy e-book: http://www.core-econ.org/]
- 2. The Health Production Function [Phelps chp. 3, FGS chp. 5, McGuire chp. 7, Barros chp5]
- a. Historical role of Medical care in the production of health
- b. The estimation of Health Production Function with aggregated data Exercises with STATA
- 3. Health Systems:
- 4. General Characteristics of the Health Care Markets [Arrow (1963)]
- a. Ethics, Efficacy, Effectiveness and Efficiency [FGS chp. 1, 4; Zweifel chp 1, 4, Ortún chp1; 3.1,
- 3.2, 3.3]
- b. General Features [J. Hurst]
- c. Moral Hazard
- 5. Equity [Rodríguez, Calonge and Reñe (1988), Rodríguez and Calonge (1998)]

### 6. Evaluation Methods [Zweifel chp2, FGS, chp. 4]

### PART 2: CHALLENGES OF GLOBAL HEALTH IMPORTANCE

- 1. Health determinants and measurements
- a. Importance of measuring health status
- b. Key health indicators
- c. Differences between incidence and prevalence; morbidity, disability, and mortality; non-communicable and communicable diseases
- d. Concepts of health adjusted life expectancy (HALE), disability adjusted life years (DALYs), and the burden of disease

Chapter 2. Skolnik, Richard. Global health 101. Jones & Bartlett Publishers, 2015.

- 2. Demographic and epidemiological transitions
- a. Leading causes of death in low-, middle-, and high-income countries
- b. Aging and Long-Term Care

Acemoglu & Johnson, 2007. "Disease and Development: The Effect of Life Expectancy on Economic Growth." Journal of Political Economy, 115(6): 925-985. http://www.jstor.org/stable/10.1086/529000 Preston (1975). "The changing relationship between mortality and level of economic development." Population Studies, 29(2): 231-48. http://www.jstor.org/stable/2173509

Fogel. (1994). "Economic Growth, Population Theory, and Physiology: The Bearing of Long-Term Processes on the Making of Economic Policy." American Economic Review, 84(3):369-95. http://www.jstor.org/stable/2118058

Deaton (2006), "Global Patterns of Income and Health: Facts, Interpretations, and Policies," NBER Working Paper 12735.

Acemoglu, Daron, Simon Johnson and James A. Robinson (2003), "Disease and Development in Historical Perspective," Journal of the European Economic Association 2(1).

#### 3. Vaccinations, externalities and herd effects

M. Kremer, "Creating Markets for New Vaccines, Part I," Innovation Policy and the Economy, 1 (2000), 35-72.

Mullahy, "It'll Only Hurt a Second: Microeconomic Determinants of Who Gets Flu Shots," Health Economics, 8 (1999), 9-24.

Parente, Salkever and DaVanzo, "The Role of Consumer Knowledge of Insurance Benefits for Preventive Health Care Among the Elderly," Health Economics, 14:1 (2005), 25-38.

Hebert, et al., "The Causes of Racial and Ethnic Differences in Influenza Vaccination Rates Among Elderly Medicare Beneficiaries," Health Services Research, 40:2 (2005), 517-537.

Maurer, "Who Has a Clue on Preventing the Flu?" Journal of Health Economics, 28:3 (2009), 704-717.

## 4. Mortality and health effects of economic crisis

Cutler et al. (2002), "Financial Crisis, Health Outcomes and Aging: Mexico in the 1980s and 1990s," Journal of Public Economics, 84(2): 279-303.

Cutler, Deaton and Lleras-Muney (2007), "The Determinants of Mortality," Journal of Economic Perspectives.

Ruhm, C. J. (2016). Health effects of economic crises. Health economics, 25(S2), 6-24. Other papers by Ruhm on this topic.

- 5. Life styles: obesity, smoking and risky behaviours
- a. The Health Impacts of Obesity
- b. Health Effects of Alcohol Consumption
- c. Economics of Tobacco Control and Health

Sturm, "The Effects of Obesity, Smoking, and Drinking on Medical Problems and Costs," Health Affairs, 21:2 (2002), 245-253.

Costa-Font and Gil, "What Lies Behind Socio-demographic Inequalities in Obesity in Spain: A Decomposition Approach." Food Policy, 33 (2008), 62-73.

Christakis and Fowler, "The Spread of Obesity in a Large Social Network Over 32 Years," New England Journal of Medicine, 357 (2007), 370-379.

Cutler, Glaeser, and Shapiro, "Why Have Americans Become More Obese?" Journal of Economic Perspectives, 17:3 (2003), 93-118.

Chouinard, et al., "Fat Taxes: Big Money for Small Change," Forum for Health Economics & Policy, 10:2 (2007), 1-28.

Wang, et al., "A Penny-Per-Ounce Tax on Sugar-Sweetened Beverages Could Cut Health and Cost Burdens of Diabetes," Health Affairs, 31:1 (2012), 199-207.

Fletcher, Frisvold, and Teft, "Can Soft Drink Taxes Reduce Population Weight?" Contemporary Economic Policy, 28:1 (2010), 23-35.

Chou, Saffer, and Grossman, "An Economic Analysis of Adult Obesity: Results from the BRFSS" Journal of Health Economics, 23:2 (2004), 565-587.

Muggli, et al., "Legislating Tolerance: Spain, s National Public Smoking Law," Tobacco Control, 19

(2010), 24-30.

López, et al., "Two-year Impact of the Spanish Smoking Law on Exposure to Secondhand Smoke: Evidence of the Failure of the "Spanish Model"," Tobacco Control, 21 (2012), 407-411

López, et al., "Impact of the 2011 Spanish Smoking Ban in Hospitality Venues: Indoor Secondhand Smoke Exposure and Influence of Outdoor Smoking," Nicotine & Tobacco Research, 15:5 (2013), 992-

Sloan, et al., Drinkers, Drivers, and Bartenders, Chicago: University of Chicago Press, 2000

- 6. Mental Health
- Economic case for better public mental health a.
- Key characteristics of mental health problems b.
- Direct and spillover effects of mental problems C.
- d. Disrupted employment, antisocial behaviour and crime

#### ASSESSMENT SYSTEM

Article critiques or midterm (40%): Each student will write two article critiques which review and critique a journal article on the syllabus. You may write on any article that you choose. Critiques are due at the beginning of class on the day the article is being discussed. If there is article that you consider relevant and interesting for this course, but it is not on this list, please e-mail me to discuss whether it can be suitable for the review.

Final exam (60%): The exam will consist of two parts, A and B. Part A will comprise twenty multiple choice questions and students will be required to answer all twenty questions. Part B will consist of five essay questions and students will be required to answer any two questions.

% end-of-term-examination: 60

% of continuous assessment (assignments, laboratory, practicals...): 40

#### **BASIC BIBLIOGRAPHY**

- Bhattacharya, Jay, Hyde, Timothy and Tu, Peter Health Economics, , Palgrave Macmillan, New York., (2014)
- FOLLAND, Sherman; GOODMAN, Allen C. y STANO, Miron. The Economics of Health and Health Care., Macmillan, Nueva York., (1993).
- MCGUIRE, A; HENDERSON, J. v MOONEY, G. The Economics of Health Care., Routledge, Londres v Nueva
- SLOAN, Frank and HSIEH, Chee Ruey. Health Economics., MIT Press., (2016)
- STIGLITZ The Economics of the Public Sector, ...
- Skolnik, Richard. Global health 101., Jones & Bartlett Publishers,, 2015.
- Sloan, et al. Drinkers, Drivers, and Bartenders., University of Chicago Press, , 2000
- The Economy, e book, [http://www.core.econ.org/]
- ZWEIFEL, Peter y BREYER, Friedrich Health Economics ,, Oxford University Press, Oxford., (1997)

## BASIC ELECTRONIC RESOURCES

- . The Economy: http://www.core econ.org/