Objectives

Environmental Policies:

The aims of the subject are: To review the economic analysis of main environmental problems as well as the different environmental policy tools. To understand the relationship between economic, social and ecological systems. To study the analytical tools of the economics of the environment. To analyse the main current debates in the field.

Health Economics and Policy Analysis:

The course will provide a broad overview of the field of health economics. It is designed to illustrate how economists analyze topics related to the production of health and the delivery of health care. The course will examine how standard concepts and methods in economics can be used to understand health-related decisions made by individuals and firms. It will also study the application of economics to health care policy, with a focus on how economic analysis can assist in the development of market and non-market solutions to various health care problems.

We will focus on theories of microeconomics with specific applications to the health care system. Using economic analysis, the course will examine important health policy issues such as the integration of the health care delivery system, the role of government programs, the impact of competition and regulation on providers and patients, the design of health insurance plans, managed care, the value of health care, and strategies for containing health care costs and increasing access to health care. Particular attention will rely on the role of incentives in shaping the structure, conduct and performance of the health care sector.

The goal of the course is to teach students to use basic economic principles to develop a better understanding of the health care sector and health policy issues.

Skills

T1: Understanding academic research in the above areas.
T2: Contextualizing problems using formal models that allow a quantitative analysis.
T3: Arguing and writing in a precise, clear and concise manner reports on the proposed problems, in English.
T4: Using various statistical software to process data.
T5: Conduct empirical studies.
T6: Make oral presentations in English.
T7: Respect the ethical, social and environmental values.

Learning outcomes

E4.1: Demonstrate a proper understanding, and be able to apply, the principles of efficiency and equity in the areas mentioned above.
E4.2: Distinguish between situations in specific cases where markets are not efficient and those that do are, and between public interventions that lead to efficiency and those that do not.
E4.3: Demonstrate a proper understanding and be able to critically analyze economic studies of international organizations such as the OECD or the European Commission on economic policies in the above areas.
E4.4: Conduct empirical studies to assess the impact of various policies: identify existing data sources or designing data collection methods, application of statistical and econometric techniques that are appropriate for the evaluation of programs and policies, formulation of empirical strategies, proper interpretation of the results.

Contents

Environmental Policies:

1. The economic analysis of the environment and ecological economics. The relationship between the economy and the environment.
   The economy and environmental problems.
3. Different conceptions of sustainable development and their applications.
5. Economic analysis of the environment and future generations. Ethics and ecological economics.
7. Environmental policy tools: tradable permits and others.
8. The relationship between economic growth, environmental quality, and environmental policies.

Health Economics and Policy Analysis:

1. What is Health Economics
   1.1 Differential characteristics of health economics
   1.2 The organization of a health care system
   1.3 Structure of a health care system

This chapter provides an introduction to the topic of health economics. In particular, describes generically the elements of a health system, identifies the agents that participate in a health system and their decision-making, and looks at the characteristics that make the sector subject of study within the economy.

2. Demand for health and health care
   2.1 Value of life and quality of life
   2.2 Demand for health

When an individuals turn into patients, demand health care services to recover their full capacity to develop their regular activities. The chapter examines how and how much the patient demands health treatments and what are the elements that determine such demand.

3. Health insurance
   3.1 Basic concepts
   3.2 Uncertainty and risk
   3.3 Insurance

The occurrence of a sickness episode contains elements beyond the control of the very individual, but also it is conditioned by life habits. These circumstances are captured by the concepts of uncertainty and risk. At the same time, a sickness episode translates into a shock in the individual’s income. To cover against this shock, the individual has the possibility to contract insurance. This chapter is devoted to study the relation between risk and insurance as well as the elements determining the decision to contract insurance.

4. Contracts and asymmetric information
   4.1 The problem of information
   4.2 Imperfect information and competition
   4.3 Incentives in the health care sector
   4.4 Asymmetric information and conflict of objectives
   4.5 Supplier-induced demand

One of the main features in the healthcare market place is the prevalence of asymmetric information between patients and providers, patients and insurers, and providers and insurers. This has important consequences in the understanding the incentives of the different agents in their relations with the other agents, and in their decision-making. This chapter is devoted to the study of how the agents close down the contracts that drive their relationships.

5. Supply of health care
   5.1 Production functions for hospitals
   5.2 Cost functions for hospitals
   5.3 The objective function of a hospital
   5.4 Reimbursement systems

The chapter studies how providers of healthcare services determine their level of provision and quality. The focus relies mainly in the hospital decision-making. In particular, we identify different models of hospital according to what agent(s) have the responsibility to decide the optimal behavior of the hospital.
6. For-profit and nonprofit organizations
   6.1 Why do nonprofit organizations exist?
   6.2 Modeling nonprofit organizations
   6.3 What do nonprofit hospital maximize?

The presence of nonprofit institutions is a distinctive feature in the healthcare sector. Thus, the first question is to identify the differential characteristics of a nonprofit institution from a for-profit one. Next, the coexistence of nonprofit institutions together with for-profit ones is an elusive question. The chapter looks at arguments of quality and non-pecuniary rewards as elements relevant in identifying an answer.

7. What is Health Policy

This is an introductory chapter to the the meaning and content of health care policy.

8. Competition and Regulation
   8.1 Yardstick competition
   8.2 Regulating the health care market

The chapter studies the main consequences of competition and the regulatory instruments with a particular focus in the healthcare market.

9. Equity in health care
   9.1 Equity in finance
   9.2 Equity in distribution

Equity is probably the main normative question in the analysis of the healthcare marketplace. There are several definitions of equity and thus different policy instruments to achieve it. The chapter is devoted to revise these different approaches to the notion of equity. Particular attention is devoted to the criteria of financing and distribution as defining elements of equity.

10. Political economy of health care
    10.1 Collectively financed health care in a democracy
    10.2 The role of professional associations in health care

The political economy of health refers to a body of analysis and a perspective on health policy to understand the conditions shaping population health and health service development. The chapter will focus on political choices including interest groups, voting behavior, and institutions like professional associations.

11. Governance in health care systems
    11.1 Accountability and delegation
    11.2 Accountaasbility and financing
    11.3 Accountability and performance
    11.4 Accountability and information
    11.5 Accountability and enforcement

"Governance" refers to the process of decision-making and the process by which decisions are implemented (or not implemented). The increased interest in governance has been driven by the need for greater accountability, arising from both increased funding and a growing demand to demonstrate results. An intrinsic aspect of governance, therefore, is accountability. This concerns the management of relationships between various stakeholders in health including individuals, households, communities, firms, governments, non-governmental organizations, private firms, and other entities which have the responsibility to finance, monitor, deliver, and use health services (World Bank 2004).

12. Bargaining in health care provision
    12.1 A primer in bargaining theory
    12.2 Negotiation between payers and providers
    12.3 Bargaining within a national health service
    12.4 Ways to enhance bargaining power

A common characteristic of managed care and national health systems is the presence of independent institutions that negotiate the reimbursement of health care provision. This chapter develops in detail the economic rationale and policy relevance of the analysis of explicit bargaining processes in health care provision. After an introduction to the basic features of bargaining theory, it moves on to an analysis of bargaining between third-party payers and providers. The main feature is that the outcome of the negotiation in terms of the reimbursement rules has an impact on the competition among providers and on the design of the health insurance contract.

Teaching Methodology

The activities that will allow the students to learn the basic concepts included in this course are:

1. **Theory lectures where the instructor will explain the main concepts.**
   The goal of this activity is to introduce the basic notions and guide the student learning

2. **Problem Sets**
   In some subjects, a problem set which students will have to solve individually or in teams will be included in every unit. The goal of this activity is twofold. On one hand students will work with the theoretical concepts explained in the classroom, and on the other hand through this practice they will develop the necessary skills for problem solving.
3. Practice lectures
The aim of this activity is to comment on and solve any possible doubt that students may have had solving the problem assignment. This way they will be able to understand and correct any errors they may have had during this process.

4. Essay writing
In some subjects students will produce written essays on the topics proposed.

5. Tutoring hours
Students will have some tutor hours in which the subject instructors will help them solve any doubts they may have.

### Learning activities

<table>
<thead>
<tr>
<th>Title (type activity)</th>
<th>Hours</th>
<th>Learning outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type: Directed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lectures with ITC support</td>
<td>37.5</td>
<td>T7, E4.1 through E4.4</td>
</tr>
<tr>
<td>Resolution of exercises</td>
<td>37.5</td>
<td>T2, T7, E4.1 through E4.4</td>
</tr>
<tr>
<td><strong>Type: Supervised</strong></td>
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<tr>
<td>Tutoring and monitoring work in progress, In-class presentations</td>
<td>62.5</td>
<td>T3, T4, T5, T6, T7, E4.1 through E4.4</td>
</tr>
<tr>
<td><strong>Type: Self learning</strong></td>
<td></td>
<td></td>
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<tr>
<td>Study, Reading, Exercise solving, Essays writing,</td>
<td>112.5</td>
<td>T1, E4.1 through E4.4</td>
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### Assessment criteria

1. The module consists of a number of different subjects or parts taught by different professors. The **final mark** for the module will consist of the average of the marks of each subject within the module.

   - The module is considered *successfully passed* if:
     - the mark for each subject within the module is higher than or equal to 3.0 (in a 0 to 10 scale), and
     - the **final mark** for that module is higher than or equal to 5.0 (in a 0 to 10 scale).

   - If the module is *not successfully passed* the MEBA coordinators will ask the student to re-take the exams for those subjects that, according to the coordinators and the professors opinions, may help the student to successfully pass the module. If the student passes the re-take exam he or she will obtain a mark of 5 for that subject, otherwise the previous grade will remain valid. The calendar for the re-retake exams will be announced along with the grades report.

2. The mark -between 0 and 10- for each subject will be computed by each professor based on his or her own criteria and on the student's performance. As a general rule, 35% of the mark will correspond to the assessment of the continuous work of the student during the course, and 65% will consist of a comprehensive final examination. The duration and nature of the final examination is decided by each professor.

3. Final exams are compulsory. Re-take exams are only thought for those students having previously written a first exam and failed.

### Assessment activities

<table>
<thead>
<tr>
<th>Title</th>
<th>Weight</th>
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<tbody>
<tr>
<td>Final exam</td>
<td>65%</td>
</tr>
<tr>
<td>Exercises and essays</td>
<td>35%</td>
</tr>
</tbody>
</table>

### Bibliography

**Environmental Policies:**

Health Economics and Policy Analysis:

Main references
