

Academic Year: ( 2024 / 2025 )

Review date: 25-04-2024

Department assigned to the subject: Economics Department

Coordinating teacher: CARRO PRIETO, JESUS MARIA

Type: Electives ECTS Credits : 6.0

Year : Semester :

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

Economics I (Microeconomics); Economics II (Macroeconomics); Statistics for social sciences I: Introduction to statistics; Statistics for social sciences II: multivariate techniques; Evaluation of public policy:

## OBJECTIVES

The aim of this course is to use economic models and the quantitative techniques to study the demand and supply of Education. It also includes analyzing the role of Education in economic development, the effects and reasons for the role of the public sector in Education, and answering key questions on current education policies.

In each part of the course, the theoretical foundations will be reviewed. We will study the main theories explaining the demand for education and the model about supply in this special sector. We will also discuss the proper methodology for estimating those demand and supply models and the main results and limitations of the existence empirical evidence.

Students will acquire the following knowledge skills:

- To understand and analyze education policy problems. Examples of issues being currently debated are the effect over efficiency and equality of opportunities of significantly increasing college tuition fees; whether it is profitable for the society and for the individual to invest more in education, differencing by levels of education; the social and private returns rates of the effect over the quality of education of the increase in the student/teacher ratio; properties of different school choice systems; effects, causes and solutions of the high school drop out rates; etc.
- To understand and analyze the role of education on economic and human development: the formation of human capital, health, political development and economic prosperity of a society.
- To understand, estimate, and interpret functions of costs and demand in order to know their determinants. and to show their utility for the formulation of education policies and their impact on development.
- To understand, estimate and analyze the effects of determinants of the quality of education.
- To analyze the public sector intervention in education.
- To study and compare different systems of financing Education and their effects.

Moreover, students will improve the following skills :

- Analytical and presentation skills of scientific results.
- Ability to evaluate empirical research in Education.
- Critical analysis of theoretical model and empirical strategies used to answer relevant questions about the education and to evaluate education policies.

With respect to attitudes, as a result of the work done in this course, the following attitudes will be strengthen:

- Curiosity and interest for solving empirical problem with rigour, and to test and quantify answer to questions in this subject.

- Ability of understand and compare several theories offering alternative explanations to a given observed fact.
- Critical attitude to detect wrong arguments and reasonings in the evaluation of education policies.

## DESCRIPTION OF CONTENTS: PROGRAMME

### 1.- International indicators in Education

Human capital indicators: Gross and Net enrolment rates, Indicators on educational expenditures and the stock of human capital. Human Development Index.

### 2.- Education and Economic Growth

Human capital and economic growth: Is there any causal relationship? Is school quality driving countries' economic growth or is it that richer countries have better education systems?

The role of education in technology adoption, growth, and economic convergence.

### 3.- Education Demand

Why do some individuals decide to study after finishing compulsory education? Which are the factors explaining the demand for education?

The Human Capital Model and its implications. Education as a Consumption Good. The Signaling Model.

Intergenerational transmission of inequality.

Empirical implications of the models. Determinants of individual education investments: socio-economic background and employment perspectives after graduation.

### 4.- The Economic Returns to Education

Are there economic returns to investments in education? Are there too many university graduates (over-education)? Mincer Earnings Equation. Effects of educational attainment on labor market outcomes. Applications.

### 5.- Educational Costs

Which are the costs of studying?

Educational Costs and Expenditures. Public and Private Expenditure on Education. Educational Costs Functions.

Economies of Scale and Scope in Education.

### 6.- The Production of Education

How is school quality measured? Which are the factors explaining school quality? How can we explain the fact that two students with the same number of years of education acquire different levels of human capital? Which is the impact on school quality of increasing class size? Which are the determinants of school dropout?

School inputs and student achievement: definitions and measures. International measures. The Determinants of School Quality. Impact of Coleman Report. Education Production functions and estimates using the Value Added Model.

Effects on quality of education of public spending, class size, peer-group effects, teachers' quality, school quality, tracking policies, etc.

### 7.- The Financing of Compulsory Education

Reasons for state intervention in education: compulsory, free and publicly produce education.

State and Local funding of publicly provided education. School vouchers: models and experiments. Publicly financed Private Education. Equity and Efficiency. School choice issues. Which are the effects of different school systems and school choice programs on equality of opportunity?

### 8.- The Financing of Higher Education

How may an increase in university fees affect equity and efficiency in higher education?

Fees, scholarships, loans and taxes. International experiences across OECD countries. The Financing of Public Universities.

Over the course we will also see the usefulness of the various aspects covered for policy analysis in education and training and for assessing the public sector intervention in education.

Bibliography can be found in the file under "Detailed subject contents or complementary information"

## LEARNING ACTIVITIES AND METHODOLOGY

For the various topics covered in this course, we will follow the following methodology:

- Motivation with relevant and topical questions on education and the basic data managed in the public debate.
- Formal explanation of the various theories developed to address and respond to each question. This will include exercises to be developed by students on these theories and their possible extensions.
- Review of the econometric techniques necessary to contrast the theories and make a measurement of effects.
- Empirical analysis of the problems and answers to the relevant questions that motivated the topic.
- Reading, presentation and critical comments by the students of different theories and the results available in the scientific literature on each topic.
- Elaboration and presentation of short empirical works by students, which may include searching for updated data that may motivate or support other theories, giving a rigorous answer to questions in the course, and describing the actual situation on the aspect treated.

## ASSESSMENT SYSTEM

<b>% end-of-term-examination:</b>	0
<b>% of continuous assessment (assignments, laboratory, practicals...):</b>	100

100% of the final grade will come from continuous assessment, which will be made as follows:

- 40% of the grade will come from the presentations made by students in class about some of the topics or issues proposed by the teacher for this purpose. These presentations will be on one of the topics covered in the course, or an empirical study done by the student, or an empirical description of some aspect based on data sought by the student, or explanation of any research article regarding some of the aspects covered in the course , etc. The final allocation of subjects and dates of presentations to each student will be made by the teacher taking into account students preferences and the proper and balanced development of the course. The assessment of this presentation will consider all aspects of the presentation herself and its preparation.
- 50% of the grade will come from two exams to be done in class, and announced in advanced.
- 10% of the grade will be based on attendance and participation with comments and questions on presentations of the rest of students.

## BASIC BIBLIOGRAPHY

- null See pdf file attached, Books and papers from various journals and sources.