



Asignatura: ENVIRONMENTAL ECONOMICS
Código: 32770
Centro: BIOLOGY
Titulación: MASTER DEGREE IN INLAND WATER QUALITY ASSESSMENT
Nivel: MASTER
Tipo: ELECTIVE
Nº de créditos: 4 ECTS

ASIGNATURA / COURSE TITLE

ECONOMIA MEDIOAMBIENTAL/ ENVIRONMENTAL ECONOMICS

1.1. Código / Course number

32770

1.2. Materia / Course type

This course is elective and is not included in any higher rank area within the master

1.3. Tipo / Course type

Elective

1.4. Nivel / Course level

Master

1.5. Curso / Year

1st

1.6. Semestre / Semester

2nd (Spring semester)

1.7. Número de créditos / Credit allotment

4 ECTS

1.8. Requisitos previos / Prerequisites

Some previous knowledge of basic microeconomics is advisable.

1.9. Requisitos mínimos de asistencia a las sesiones presenciales / Minimum attendance requirement

Attendance is mandatory



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1.10. Datos del equipo docente / Faculty data

Lecturer. Jorge Turmo Arnal.
Department of Economic Analysis
Faculty of Economics
Office 315 - Module X
Phone: +34 91 4976153
Email: jorge.turmo@uam.es
Office hours: Monday 10:30-13:30

1.11. Objetivos del curso / Course objectives

Learning outcomes.

The students will be able to propose which tools and procedures are the best to manage a specific environmental issue, regarding their advantages and disadvantages from the economic point of view.

Competences.

Generic: G1, G2, G3, G4, G5 y G6
Specific: C7, C20

1.12. Contenidos del programa / Course contents

1. Syllabus.

Module 1. Markets in action.

- A) Introduction to markets.
- B) The consumer side. Preferences and Utility. The demand function. Price elasticity and income elasticity.
- C) The supplier side. Costs and technology. The production function.
- D) Market equilibrium and efficiency.
- E) Main features of water markets; supply, demand, pricing processes and equilibrium

Module 2. Market failures.

- A) Water markets as a natural monopoly.



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- B) Public goods. Main features. The free riding problem. The economical approach to public goods. Is fresh water a public good or a private one?
- C) External effects. The private cost and social cost. Private optimum and social optimum.
- D) The failures of the markets of water.

Module 3. Policy for water sustainability in the UE.

- A) Water scarcity. Privatization and price systems.
- B) The trade off between production and pollution. The social optimum principle.
- C) Qualitative sustainability.
 - a. Private agreements.
 - b. Environmental taxes and standards.
 - c. Marketable permits.

1.13. Referencias de consulta / Course bibliography

Main references.

Parkin, M. (2005) *Microeconomics*. Pearson Education. Ch. 1,3,4,5,6,9, 11, 12,15, 16

Perman, R., Ma, Y., McGilvray, J., Common, M. (1999) *Natural Resource & Environmental Economics*. Ed Pearson Education, Ch 11, 12

Additional references will be given to the students at the beginning of the course.

2. Métodos docentes / Teaching methodology

1. Lectures by e-learning methodologies. The material for every lecture will be released to the students in advance. They have to read it and in some cases, write a very short essay on it that will be discussed in class.
2. Papers prepared individually or in groups. The papers will cover the main topics of the course. The students will write a summary and a critical assessment of every one. The articles and the work of the students will be discussed in an open seminar session on-line
3. Specific topics to be discussed. General issues concerning, but not strongly related with the course will be suggested to the students. They will collect information and post their own opinions.



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4. Office hours, including online

3. Tiempo de trabajo del estudiante / Student workload

1. Lectures. 33 hours (presential)
 2. Additional exercises. 3 hours
 3. Papers to be delivered. 42 hours.
 4. Time to be spent on the preparation of the exams. 22 hours.
- Overall workload: 4 ECTS * 25 hours = 100 hours.

4. Métodos de evaluación y porcentaje en la calificación final / Evaluation procedures and weight of components in the final grade

1. Evaluation procedures. Continued evaluation, assay tests and exam test
2. Distribution.
 - a. Papers prepared individually or in groups:
 - i. Module 1. 10%.
 - ii. Module 2. 20%
 - iii. Module 3. 30%
 - b. Exams. 40 %

Any student that participated less than 10% of evaluable activities will be qualified as “unevaluated”.

In the case that the student does not obtain the minimum requirements for passing the course (see evaluation section) will have another opportunity

5. Cronograma* / Course calendar

Week	Contents	Contact hours	Independent study time
1	Module 1 A)+B)	3	3
2	Module 1 C)+D)	3	3



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Week	Contents	Contact hours	Independent study time
3	Module 1 E)	3	5
4	Module 2 A)	3	5
5	Module 2 B)	3	5
6	Module 2 C)	3	7
7	Module 2 D)	3	7
8	Module 3 A)	3	8
9	Module 3 B)	3	8
10	Module 3 C)	3	8
11	Module 3 D)	3	8