



Asignatura: ENVIRONMENTAL ECONOMICS
Código: 31906
Centro: BIOLOGY
Titulación: MASTER DEGREE IN INLAND WATER QUALITY ASSESSMENT
Nivel: MASTER
Tipo: ELECTIVE
Nº de créditos: 4

ASIGNATURA / **COURSE TITLE**

ECONOMIA MEDIOAMBIENTAL/ **ENVIRONMENTAL ECONOMICS**

1.1. Código / **Course number**

32270

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
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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.

Lesson 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.

Lesson 2. Water markets.

- A) Why water markets are different from other markets.
- B) Water demand and water supply.
- C) Equilibrium in Water Markets



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Lesson 3. Market failures.

- A) Water markets as a natural monopoly.
- 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 public intervention in water markets.

Lesson 4. Water sustainability tools and policies 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.

Lesson 5. Valuing the environment

- A) Defining the values of the environment.
- B) Methods of assessing these values.

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 and in classroom. 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. The topics will be discussed in class.
2. Reports prepared individually or in groups. The reports will cover the main topics of the course. The students will be given one or more articles and



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- they will write a summary and a critical assessment of every one. The articles and the reports of students will be discussed in class.
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 explain their own opinions.
 4. Office hours, including online

3. Tiempo de trabajo del estudiante / Student workload

1. Lectures. 33 hours (physical classroom and virtual classroom if necessary)
 2. Additional exercises. 3 hours
 3. Reports preparation. 42 hours.
 4. Time spent preparing the exam. 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. Lesson 3 13,3, %
 - ii. Lesson 4 26,6, %
 - b. Discussion of the papers in class. 10%
 - c. Exam. 50 %

Any student that has participated in less than 10% of evaluable activities will be qualified as “not graded”. If a student fails to achieve a minimum overall grade of 5 out of 10, he/she will try again the exam or the reports or both to pass the subject.

5. Cronograma* / Course calendar

Week	Contents	Contact hours	Independent study time
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Week	Contents	Contact hours	Independent study time
1	Lesson 1	3	3
2	Lesson 1	3	3
3	Lesson 2	3	5
4	Lesson 2	3	5
5	Lesson 2	3	5
6	Lesson-3	3	7
7	Lesson 3	3	7
8	Lesson 3-4	3	8
9	Lesson 4	3	8
10	Lesson 4	3	8
11	Lesson54	3	8