

## SUBJECT TEACHING GUIDE

G719 - Environmental Politics and Economics

Degree in Industrial Technologies Engineering

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Degree in Industrial Technologies Engineering			Type and Year	Optional. Year 4
Faculty	School of Industrial Engineering and Telecommunications				
Discipline	Subject Area: Management and Industrial Organisation Optional Module				
Course unit title and code	G719 - Environmental Politics and Economics				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. ADMINISTRACION DE EMPRESAS				
Name of lecturer	SAUL TORRES ORTEGA				
E-mail	saul.torres@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO (1035)				
Other lecturers	PEDRO DIAZ SIMAL				

3.1 LEARNING OUTCOMES
- The student will understand the operation of the economic incentives derived from the regulations and environmental regulations.
- The student will evaluate the environmental consequences of engineering projects.
- The student will evaluate the optimal management of natural resources.

4. OBJECTIVES
To analyse the impact of environmental management mechanisms on the behaviour of economic agents .
To assess the environmental consequences of engineering projects and know and apply the usual valuation instruments .
To apply dynamic techniques of economic evaluation to the different types of natural resources .

6. SUBJECT PROGRAM	
CONTENTS	
1	VALUATION OF NATURAL RESOURCES
1.1	Methods of natural resources valuation. Travel cost, hedonic prices, avoided damages, production function, contingent valuation, choice experiments. Introduction to environmental cost-benefit analysis.
2	ENVIRONMENTAL POLICY
2.1	The marginal equilibrium model in environmental economics. The Marginal Damage Curve, The Marginal Cost of Emission Reduction Curve. The optimum level of contamination. Integral modeling of the pollution management system. Environmental management instruments.
3	ECONOMY AND MANAGEMENT OF NATURAL RESOURCES
3.1	Economics of natural resources. Dynamic optimization models. Exhaustible resources. Recycled resources. Renewable resources.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Teaching Unit #1. Collection of deliverables of practical exercises and case studies.	Others	No	Yes	30,00
Teaching Unit #2. Collection of deliverables of practical exercises and case studies.	Others	No	Yes	30,00
Teaching Unit #3. Collection of deliverables of practical exercises and case studies.	Others	No	Yes	30,00
Active participation during the course.	Others	No	No	10,00
<b>TOTAL</b>				<b>100,00</b>
<b>Observations</b>				
<p>According to the Royal Decree RD 1125/2003 on the European system of credits and the system of qualifications in official university degrees and valid throughout the national territory, the results obtained by the student in each of the subjects of the curriculum will be graded according to the following numerical scale from 0 to 10, expressed to one decimal place, to which the corresponding qualitative grade may be added: 0.0-4.9: Fail (SS). 5.0-6.9: Pass (AP). 7.0-8.9: Notable (NT). 9.0-10: Outstanding (SB)</p> <p>In view of the uncertain situation that the social distancing measures established by the health authorities do not allow any evaluation activity to be carried out in the classroom for all the students enrolled, these can be adapted for development in a virtual way, mainly by using the MOODLE platform. If necessary, all the necessary precautions and actions will be taken to ensure the correct development of these activities.</p>				
<b>Observations for part-time students</b>				
<p>Part-time students may take a final theoretical exam in the ordinary and extraordinary terms. This exam will represent 100% of the grade.</p> <p>Otherwise, they may choose to follow the normal assessment of the subject, adapting, if necessary, the temporal distribution of activities.</p>				

**8. BIBLIOGRAPHY AND TEACHING MATERIALS**

**BASIC**

Azqueta Oyarzun, D.  
Introducción a la economía ambiental.  
McGraw-Hill (2007).  
<http://catalogo.unican.es/cgi-bin/abnetopac/?TITN=268711>

Labandeira Villot, X.  
Economía ambiental.  
Pearson Educación (2007)  
<http://catalogo.unican.es/cgi-bin/abnetopac/?TITN=257879>

Field, Barry C.  
Economía del medio ambiente.  
McGraw-Hill (2003)  
<http://catalogo.unican.es/cgi-bin/abnetopac/?TITN=206929>

Materiales propios de la asignatura.