

SUBJECT TEACHING GUIDE

G1184 - Environmental Management

Degree in Civil Engineering

Academic year 2021-2022

1. IDENTIFYING DATA					
Degree	Degree in Civil Engineering			Type and Year	Optional. Year 4
Faculty	School of civil Engineering				
Discipline	Optional Subjects: Open to all Itineraries				
Course unit title and code	G1184 - Environmental Management				
Number of ECTS credits allocated	6	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. CIENCIAS Y TECNICAS DEL AGUA Y DEL MEDIO AMBIENTE
Name of lecturer	JUAN JOSE AMIEVA DEL VAL
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Other lecturers	

3.1 LEARNING OUTCOMES

- To know how to apply environmental management tools in the areas of their specialty .
To establish strategies to introduce environmental and sustainability criteria in their area of competence .
To develop the necessary skills for the fulfillment of the administrative managements that the development of their professional competencies requires.
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4. OBJECTIVES

Section I:

- To know principles guiding the environmental normative body and the sustainable development policy in the European Unión .
- To know how to adapt these principles to the Spanish competence framework : State, regional and local levels.
- To identify key concepts of sustainable development and environmental excellence in the planning , projection and execution of infrastructure.

Section II:

- to interpret how the guiding principles of hydraulic resources management are applied in the Water Framework Directive to the new paradigm of Integral water management, with special emphasis on the urban cycle.

Section III:

- To identify the hierarchical order of the integral management of solid waste .
- To know the tools and management systems that develop these hierarchical principles .

Section IV:

- To know the fundamentals of the applicable policies and tools to reduce GHG emissions and improve air quality .
- To know the new concepts on which the low carbon economy is based .

Section V:

- To apply environmental management tools (LCA, EMS, sustainability reports) and to know the associated quality standards.

6. COURSE ORGANIZATION

CONTENTS	
1	Water Resources Management
2	Solid Waste Management
3	Air Quality
4	Environmental management instruments: environmental audits, life cycle analysis, carbon footprint, water footprint

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Group presentation and discussion with the participation of each of the members	Work	No	Yes	25,00
Accomplishment of individual work and exhibition of a case study	Work	No	Yes	50,00
Water and Solid Waste analysis	Laboratory evaluation	No	Yes	15,00
Theoretical exam on concepts of the thematic sections	Written exam	No	Yes	10,00
TOTAL				100,00
Observations				
<p>With regard to the agreements adopted at the ordinary meeting of the School Board held on 10 June 2010, it is established that, with respect to evaluation activities which have the character of recoverable, as a general criterion and except that this guide says a different thing, a student will only be able to attend to the recovery of those activities that are passed, ie, in which he has not obtained a minimum qualification of four over ten.</p> <p>As a general criterion and except that this guide specifies a different thing, in the period of recovery the procedure of evaluation of an activity will be the same as that of the activity that originates it.</p> <p>Note: According to Royal Decree RD 1125/2003 on the European system of credits and the system of qualifications, in the official and with validity in the whole national territory degrees, the results obtained by the student in each one of the subjects of the syllabus will be qualified according to the following numerical scale from 0 to 10, with expression of a decimal, to which the corresponding qualitative qualification can be added:</p> <p>0.0-4.9: Suspense (SS) 5.0-6.9: Approved (AP) 7.0-8.9: Notable (NT) 9.0-10: Outstanding (SB).</p>				
Observations for part-time students				
<p>The theoretical examination will deal with the same aspects as for the ordinary students adapting their realization to the conditions that have motivated the justification of the student to choose the modality of part time. Same score.</p> <p>The practice of LCA in this case will be carried out under the tutor's on-line tutorial. Same score.</p> <p>Participation in group work and presentation of individual work via Skype or similar. Same score..</p>				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Sistemas de gestión ambiental. María José Prieto González Editorial: AENOR ISBN: 978-84-8143-648-8.
Gestión Ambiental AUTOR/ES: AENOR. - Publicaciones AENOR
ISBN: 9788481437041

Programa General de Acción de la Unión en materia de Medio Ambiente hasta 2020. Diario Oficial de la Unión Europea.

ESTRATEGIA ESPAÑOLA DE CAMBIO CLIMÁTICO Y ENERGÍA LIMPIA. MAGRAMA.

Plan para salvaguardar los recursos hídricos de Europa.Bruselas, 14. 11.2012
COM(2012) 673 final.

Preparing a Waste Management Plan: A methodological guidance. European Commission. Directorate-General Environment.

Sistemas de gestión ambiental. María José Prieto González Editorial: AENOR ISBN: 978-84-8143-648-8.
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