

SUBJECT TEACHING GUIDE

M2143 - Engineering Projects

Master's Degree in Environmental Engineering and Management

Academic year 2022-2023

1. IDENTIFYING DATA					
Degree	Master's Degree in Environmental Engineering and Management			Type and Year	Optional. Year 1
Faculty	School of civil Engineering				
Discipline	Complement in Training				
Course unit title and code	M2143 - Engineering Projects				
Number of ECTS credits allocated	3	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	Yes	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS
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Other lecturers	

3.1 LEARNING OUTCOMES

- To have the bases to be able to draw up, in agreement with the technicians, a construction project of Environmental Engineering, previous analysis of the conditions established by the property, as well as those of legal and technical nature, which are going to affect the future work.

Understand the role of the agents involved in the administrative process of definition and management of environmental engineering works, both from a technical and legal point of view.

Be able to develop teamwork, as well as use the main computer tools commonly used in the development of engineering projects.

Know the basic contractual aspects related to the execution of the projected works and, consequently, be determined to interpret a contract for the execution of works and observe its compliance.

4. OBJECTIVES

The main objective of the course is to provide students who enter the master's degree course from grades other than engineering with basic knowledge in the field of construction projects, both in terms of their structure and content, and in terms of the entities that participate in the complete life cycle of the project. Different aspects will be analysed relating to the collection of information and previous studies; economic approach; approach and selection of alternatives; drafting and processing of the project; preparation and development of the contract for the execution of the work, and monitoring and control of the work.

A practical case of an environmental engineering project will be addressed, in which the knowledge acquired can be developed and applied.

6. COURSE ORGANIZATION

CONTENTS	
1	The project as a document and as an activity - Types of projects and entities participating in the project life cycle.
2	Collection of information and previous studies - Economic approach - Proposal and selection of alternatives.
3	Analysis of project documents.
4	Preparation and development of the contract for the execution of the work.
5	Carrying out an environmental engineering project. (Group work).

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Description Presentation and exhibition of the work	Work	Yes	Yes	100,00
TOTAL				100,00
Observations				
<p>In relation to the agreements adopted at the ordinary session of the School Board held on 10 June 2010, it is established that, with regard to assessment activities that are of a recoverable nature, as a general criterion and unless otherwise specified in this guide, a student may only present himself/herself for the recovery of those activities that he/she has not passed, that is to say, in which he/she has not obtained a minimum grade of five out of ten.</p> <p>As a general criterion and unless otherwise specified in this guide, in the period of recovery the procedure for evaluating an activity will be the same as that for the activity from which it originates.</p> <p>Note: 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, with the expression of one decimal place, to which the corresponding qualitative grade can be added:</p> <p>0.0-4.9: Fail (SS). 5.0-6.9: Pass (AP). 7.0-8.9: Notable (NT). 9.0-10: Outstanding (SB)</p>				
Observations for part-time students				
<p>Part-time students may substitute individual work for 'group work' if they wish. As for the theoretical part of the subject, since attendance is not compulsory, there is no need to establish a special regime, and students can take the evaluations like other students.</p>				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

- Cañizal, F., Pérez Hernando, M.A. (1998). - "La Redacción del Proyecto. Aspectos Previos y Metodología". - E.T.S de Ingenieros de Caminos, Canales y Puertos.- Universidad de Cantabria.
- Cañizal, F; Apuntes sobre Contratos del Sector Público (2019)
- Martínez Montes, G.; Pellicer Almiñana, E. (2006) "Organización y Gestión de Proyectos y Obras".- Ed. Mc Graw Hill.