

## SUBJECT TEACHING GUIDE

533 - Study of the regeneration of a beach in erosion

Master's Degree in Coasts and Ports

Academic year 2024-2025

1. IDENTIFYING DATA					
Degree	Master's Degree in Coasts and Ports			Type and Year	Optional. Year 1
Faculty	School of civil Engineering				
Discipline					
Course unit title and code	533 - Study of the regeneration of a beach in erosion				
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	RAUL MEDINA SANTAMARIA				
E-mail	raul.medina@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 0. DESPACHO (0050)				
Other lecturers	ERNESTO MAURICIO GONZALEZ RODRIGUEZ				

3.1 LEARNING OUTCOMES
- To be able to diagnose the degree of stability of a beach.
- To be able to carry out a beach nourishment project
- To be able to perform a technical report covering the above aspects (diagnosis, proposals for action and monitoring of a beach nourishment project)
- To be able to present in public a technical report as indicated above, presenting the results in a concise and clear manner.
- To understand the spatial and temporal scales of coastal problems

**4. OBJECTIVES**

The aim of the course is to give students the skills to design coastal works, particularly those aimed at the regeneration of beaches undergoing erosion processes

**6. SUBJECT PROGRAM**

**CONTENTS**

1	Structure of a beach regeneration study and presentation of the case study
2	Study area morphology. Bathymetry pre-process
3	Maritime climate study
4	Coastal morphodynamics study
5	Beach nourishment alternatives: proposal and evaluation
6	Case study presentation

**7. ASSESSMENT METHODS AND CRITERIA**

Description	Type	Final Eval.	Reassessn	%
Study area morphology (oral presentation)	Others	No	Yes	5,00
Maritime climate (oral presentation)	Others	No	Yes	15,00
Coastal morphodynamics (oral presentation)	Others	No	Yes	20,00
Beach nourishment project (oral presentation)	Others	No	Yes	20,00
Case study presentation	Work	Yes	No	40,00
<b>TOTAL</b>				<b>100,00</b>

**Observations**

Students work on a beach erosion case study and make an oral presentation of the work done every week. The grade is based on these oral presentations and the final report on the case study analysis and course of actions.

Only for duly justified causes (eg sanitary restrictions), the evaluations may be organized remotely, with prior authorization from the Center's Direction.

**Observations for part-time students**

Part-time students will apply the same assessment criteria as full-time students. The temporary distribution of activities will be adapted to the particular conditions of each student when deemed necessary.

In accordance with the regulations of the evaluation processes, collected and regulated in the academic management regulations of the University of Cantabria, students enrolled part-time may undergo a single evaluation process that will consist of a written exam of the entire subject on the date established for this purpose by the address of the engineering school

**8. BIBLIOGRAPHY AND TEACHING MATERIALS**

**BASIC**

Archivo de estudios de regeneración de playas del Instituto de Hidráulica Ambiental

