

SUBJECT TEACHING GUIDE

510 - Theoretical and Practical Bases for Risk Assessment

Erasmus Mundus Joint Master Degree in Coastal Hazards - Risks, Climate Change Impacts and Adaptation

Academic year 2023-2024

1. IDENTIFYING DATA			
Degree	Erasmus Mundus Joint Master Degree in Coastal Hazards - Risks, Climate Change Impacts and Adaptation	Type and Year	Compulsory. Year 1
Faculty	School of civil Engineering		
Discipline			
Course unit title and code	510 - Theoretical and Practical Bases for Risk Assessment		
Number of ECTS credits allocated	5	Term	Semester based (1)
Web			
Language of instruction	English	Mode of delivery	Face-to-face

Department	DPTO. CIENCIAS Y TECNICAS DEL AGUA Y DEL MEDIO AMBIENTE		
Name of lecturer	PEDRO DIAZ SIMAL		
E-mail	pedro.diaz@unican.es		
Office	Edificio IH Cantabria. Planta: + 2. DESPACHO (228)		
Other lecturers	SAUL TORRES ORTEGA		

3.1 LEARNING OUTCOMES
<ul style="list-style-type: none"> - Rigorously handle the basic concepts of analysis. Identify the approaches to risk that arise in technical work Diagnose and quantitatively assess existing risk levels Formulate decision making in a risk environment.

4. OBJECTIVES
<p>The aim of the course is to introduce the student to the techniques of risk assessment, formulating technical problems in the light of the requirements of the subject.</p> <p>in the light of the requirements of risk assessment.</p>

6. COURSE ORGANIZATION

CONTENTS	
1	Risk. Introduction and basic concepts
2	Terminology and applied methods (sectoral developments)
3	Probabilistic risk measurement
4	Measuring consequences
5	Economic risk assessment
6	Governance, communication and risk management

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Test of content	Written exam	No	Yes	40,00
Practical exercises	Work	No	Yes	40,00
Coursework	Work	No	No	20,00
TOTAL				100,00
Observations				
Only for duly justified reasons (e.g. health restrictions) may the assessment tests be organised remotely, with the prior authorisation of the School Management.				
Observations for part-time students				
The same evaluation criteria will be applied to part-time students as to full-time students. The time distribution of activities will be adapted to the particular conditions of each student when deemed necessary.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

Risk Analysis in Engineering and Economics, 2nd Edition, Bilal M. Ayyub CRC
Apuntes de clase elaborados por los profesores