

## SUBJECT TEACHING GUIDE

### G177 - Water Resources

### Degree in Geography and Land Planning

Academic year 2023-2024

1. IDENTIFYING DATA					
Degree	Degree in Geography and Land Planning			Type and Year	Compulsory. Year 3
Faculty	Faculty of Humanities				
Discipline	Geographical Fundamentals for Land Use Planning				
Course unit title and code	G177 - Water Resources				
Number of ECTS credits allocated	6	Term	Semester based (1)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. GEOGRAFIA, URBANISMO Y ORDENACION DEL TERRITORIO				
Name of lecturer	CAROLINA GARMENDIA PEDRAJA				
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Other lecturers					

3.1 LEARNING OUTCOMES
- Coherent and integrated explanation of the hydrological cycle and its relation to the whole natural environment (relief, climate, biosphere...)
- Recognition of the different factors (natural and human) that influence the characteristics of water resources.
- Working suitably with information obtained from basic sources and bibliography, evaluating their quality and contrasting the results.
- Organization and argumentation of a topic using suitable and precise vocabulary and the basic concepts as well as the information obtained.

#### 4. OBJECTIVES

Know the consequences, both physical and environmental, of the fact that water undergoes changes of state at different rates depending on the phase it is in and its location in the different regions of the world .

Interrelate the physical environment with the social context: water availability, variability, dynamics and quality are aspects that increasingly depend, directly or indirectly, on human activity. Therefore, the human role is twofold, as a transforming agent and also as the victim of the changes provoked by the Hydrosphere.

Understand the problems in a multidimensional way, analysing the agents and processes intervening in water management on different scales, studying the complexity of situations and conflicts generated by the poor usage of this resource, from social, economic and political context.

#### 6. SUBJECT PROGRAM

##### CONTENTS

1	THE HYDROSPHERE AND THE WATER CYCLE
2	CONTINENTAL FRESH WATER
3	CONTINENTAL WATERS: RESOURCE AND CONFLICT OF USAGES
4	OCEANIC WATERS
5	THE OCEAN AS A RESOURCE PROVIDER: EXPLOITATION AND CONSERVATION
6	INITIATION TO INVESTIGATION WORKSHOP I
7	INITIATION TO INVESTIGATION WORKSHOP II
8	INITIATION TO INVESTIGATION WORKSHOP III
9	Final exam (written exam): The final exam includes all the content taught throughout the semester.

7. ASSESSMENT METHODS AND CRITERIA				
Description	Type	Final Eval.	Reassessn	%
Final exam	Written exam	Yes	Yes	40,00
Practical work in group	Work	Yes	Yes	30,00
Individual practical work	Work	Yes	Yes	30,00
TOTAL				100,00
Observations				
<p>The laboratory practice consists of a half-day field trip.</p> <p>Course evaluation will be done through the presentation of all the exercises proposed (60%) and a written exam (40%). The final mark in the subject will be the average of the practical and exam marks. Nevertheless, to calculate the average IT IS NECESSARY TO PASS BOTH PARTS.</p> <p>Correct utilisation of specific technical vocabulary, a solid conceptual base and capacity to manage, manipulate and interpret the data used will be required. Aspects such as writing, clarity in explanation, capacity in synthesis and conceptualization will be assessed.</p> <p>The formal presentation of the course work must be in accordance with the norms established at the beginning of the course: bibliography list and sources utilized; references in the text to these; each citing correctly indicated (inverted commas, author...); etc. If these norms are not fulfilled, the work will be considered PLAGIARISED and so THE ONLY POSSIBLE MARK WILL BE ZERO (FAIL).</p> <p>For any question on evaluation issues, the provisions of the Evaluation Process Regulations of the University of Cantabria will be attended to.</p>				
Observations for part-time students				
Part-time students will be subject to the University of Cantabria regulations.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS
BASIC
EEA (2006). The changing faces of Europe's coastal areas. Copenhagen: European Environment Agency, EEA Report, n° 6/2006. Disponible, en mayo de 2015, en: <a href="http://www.eea.europa.eu/publications/eea_report_2006_6">http://www.eea.europa.eu/publications/eea_report_2006_6</a>
EEA (2012). Towards efficient use of water resources in Europe. Copenhagen: European Environment Agency, EEA Report, n° 1/2012. Disponible, en mayo de 2015, en: <a href="http://www.eea.europa.eu/publications/towards-efficient-use-of-water">http://www.eea.europa.eu/publications/towards-efficient-use-of-water</a>
FAO (2014). El estado mundial de la pesca y la acuicultura. Oportunidades y desafíos. Roma: Organización de las Naciones Unidas para la Agricultura y la Alimentación. Disponible, en mayo de 2015, en: <a href="http://www.fao.org/3/a-i3720s/index.html">http://www.fao.org/3/a-i3720s/index.html</a>
Gil Olcina, A. y Morales Gil, A. (Eds.) (1998). Los usos del agua en España. Coloquio sobre los usos del agua en España. Alicante: Caja de Ahorros del Mediterráneo; Universidad de Alicante, Instituto Universitario de Geografía [CAM / Básica / 556.5 8; CAM / Monografías / 556.5e 30].
Pueyo Losa, J. y Urbina, J.J. (Coords.) (2009). La cooperación internacional en la ordenación de los mares y océanos. Madrid: Iustel, Colección Monografías [DEC / Monografías / MAi coo].
UN WATER (2007). El agua, una responsabilidad compartida. 2º Informe de las Naciones Unidas sobre el Desarrollo de los Recursos Hídricos en el Mundo. United Nations World Water Development Report 2 (Un-Water/WWAP/2007/02). París / Nueva York: UNESCO. Disponible, en mayo de 2015, en: <a href="http://unesdoc.unesco.org/images/0014/001495/149519S.pdf">http://unesdoc.unesco.org/images/0014/001495/149519S.pdf</a>