

## SUBJECT TEACHING GUIDE

G1170 - Water Quality Management

Degree in Civil Engineering

Academic year 2022-2023

1. IDENTIFYING DATA					
Degree	Degree in Civil Engineering			Type and Year	Optional. Year 4
Faculty	School of civil Engineering				
Discipline	Optional Subjects: Curricular Itinerary 2				
Course unit title and code	G1170 - Water Quality 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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Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 2. DESPACHO (2030)				
Other lecturers					

### 3.1 LEARNING OUTCOMES

- Students should learn the following task:
- Know the different types of water pollutants.
  - Learn the different processes used to treat wastewater.
  - Know the possible problems that the wastewater can present related to the industrial process and its possible treatments.

#### 4. OBJECTIVES

- To get better knowledge in wastewater treatment processes.
  - Offer and evaluate the different solutions for a correct water management.
- Analyze the current wastewater treatments.
- Know the different types of water pollutants.

#### 6. COURSE ORGANIZATION

##### CONTENTS

1	-Types of natural waters
2	- Pollutants in waters.
3	- Water treatment processes.
4	- Water management.

#### 7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
-During the course time made problems and visits to diferents Plants of wastewater treatment	Others	No	No	25,00
practical work in the laboratory	Laboratory evaluation	No	No	25,00
-Elaborate a work and make a presentation in the class. during 15 minutes	Work	Yes	Yes	50,00
		No	No	0,00
<b>TOTAL</b>				<b>100,00</b>
<b>Observations</b>				
For the final work, the students should elaborate and defend (written and oral presentation) a work that is related to a topic discussed in the class.				
<b>Observations for part-time students</b>				
The same criteria as for the rest of the students				

#### 8. BIBLIOGRAPHY AND TEACHING MATERIALS

##### BASIC

- EL MEDIO AMBIENTE: INTRODUCCION A LA QUIMICA MEDIOAMBIENTAL Y A LA CONTAMINACION VV.AA. ACRIBIA EDITORIAL, 2003
- CONTAMINACION AMBIENTAL: UNA VISION DESDE LA QUIMICA VV.AA. EDICIONES PARANINFO, S.A., 2002