

SUBJECT TEACHING GUIDE

G1170 - Water Quality Management

Degree in Civil Engineering

Academic year 2021-2022

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				
E-mail	juan.amieva@unican.es				
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
TOTAL				100,00
Observations				
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.				
Observations for part-time students				
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