

SYLLABUS

1. COURSE DESCRIPTION

Degree:	Environmental Sciences
Course:	Water Treatment and Waste Management
Module:	Environmental Technology
Department:	Molecular Biology and Biochemical Engineering
Academic Year:	2017-18
Term:	Second
ECTS credits:	6
Year:	3rd year
Type:	Compulsory
Language:	Spanish

Course Model:	B1	
a. Basic learning (EB):		60 %
b. Practical learning (EPD):		40 %

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2. LECTURERS

Coordinator	
Name:	Juan Carlos Gutiérrez Martínez
School:	Experimental Sciences
Department:	Molecular Biology and Biochemical Engineering
Area:	Chemical Engineering
Office:	22.00.13
E-mail:	jcgutmar@upo.es
Phone:	954.97.80.02

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3. TOPICS

Topic I. Water Treatment for Human Consumption.

- Unit 1. Correction of the chemical characteristics of natural water.
- Unit 2 Correction of the biological characteristics of natural water.
- Unit 3 Correction of the physical characteristics of natural water.
- Unit 4 Water clarification.

Topic II. Waste water treatment.

- Unit 5. Characteristics of wastewater and effluent.
- Unit 6. General scheme of a Wastewater Treatment Plant.
- Unit 7. Water Line. Pretreatment Primary Treatment Secondary treatment.
- Unit 8. Sludge Line. Characteristics of the sludge. Thickening. Stabilization. Dehydration
- Unit 9. Biocenosis and its evolution in the biological reactor. Problems in the biological reactor associated with microorganisms.

Topic III. Solid Waste: Treatment and Management.

- Unit 10. Elimination of solid contaminants present in gaseous streams. Separation and treatment operations. Industrial equipment
- Unit 11. Operations of solid waste separation and treatment. Operations and equipment. The management of urban waste. The Composting