



IDENTIFYING DATA

(*)Enxeñaría ambiental

Subject	(*)Enxeñaría ambiental			
Code	P03G370V01609			
Study programme	(*)Grao en Enxeñaría Forestal			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Optional	3rd	2nd
Teaching language	Spanish Galician			
Department				
Coordinator	Ortiz Torres, Luis			
Lecturers	Ortiz Torres, Luis			
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General description	(*)metodos e sistemas de xestión medioambiental			

Competencies

Code

Learning outcomes

Expected results from this subject	Training and Learning Results
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Topic	
A. ATMOSPHERIC POLLUTION	A.1. ENVIRONMENTAL POLLUTANTS A.2. EFFECTS OF ATMOSPHERIC POLLUTION A.3. DESTRUCTION OF THE OZONE LAYER A.4. GLOBAL QUALITY A.4.1. Greenhouse gases A.4.2. The Kyoto Protocol A.5. ACID RAIN A.6. OTHER CONTAMINANTS A.7. RIGHTS CORRUPTION OF POLLUTION A.8. ALTERNATIVE SOURCES OF ENERGY TO REDUCE ATMOSPHERIC EMISSIONS A.9. THE COGENERATION OF HEAT AND ELECTRICITY
B. RESIDUAL WATERS B.1. WATER	B.2. MANAGEMENT SYSTEMS: B.3. PHYSICO-CHEMICAL WATER PARAMETERS B.4. RESIDUAL WATER CONTAMINANTS B.5. RESIDUAL WATER PURIFICATION SYSTEMS B.5.2. Primary treatment B.5.2.1. Physical and Chemical Treatments B.5.3. Secondary treatment B.5.3.1. Biological Treatments B.5.4. Tertiary treatment B.5.5. Miscellaneous Treatments B.6. THE ANAEROBIA DIGESTION PROCESS B.7. FLOOR TREATMENT B.8. CASE STUDY

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G. TOXIC AND DANGEROUS WASTE	G.1. IDENTIFICATION AND QUANTIFICATION OF RTP. G.2. PRODUCTION MANAGER RELATIONSHIP G.1.1. Obligations of the RPT Producer G.1.1.1. Authorization request G.2.1.2. Packaging and Labeling of Hazardous Wastes G.2.1.3. Storage of hazardous waste G.2.1.4. Annual statement G.2.2. OBLIGATIONS OF SMALL PRODUCERS OF HAZARDOUS WASTE

Planning			
	Class hours	Hours outside the classroom	Total hours
Studies excursion	20	40	60
Case studies	10	0	10
Autonomous problem solving	9	20	29
Lecturing	17	33	50
Essay questions exam	1	0	1

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

Methodologies
Description

Studies excursion	Practices Practice 1.- Waste water treatment plant (EDAR - Pontevedra) Practice 2.- MSW treatment plant (SOGAMA - Cerceda) Practice 3.- Cogeneration and treatment of effluents (ENCE) Practice 4.- Cogeneration and waste management (ECOWARM- Bastabales)
	The A91 competition will be developed in the field of industrial facilities visits.
Case studies	Individual or paired an individual chosen within the contents of the program for the elaboration of a situation or concrete case that will be presented publicly.
Autonomous problem solving	This is to present flow diagrams of the facilities visited during the course
Lecturing	These are theoretical classes in the classroom

Personalized assistance

Methodologies	Description
Studies excursion	These are views of industrial facilities
Case studies	It is a practical work and present it publicly

Assessment

	Description	Qualification Training and Learning Results
Studies excursion	(*)Valórase a asistencia dos alumnos ás saídas prácticas	10
Case studies	(*)O traballo é valorado e avaliado polos propios compañeiros tras a presentación do mesmo e polo profesor quen terá en consideración todos os factores sinalados no apartado de traballos tutelados	20
Lecturing	(*)Valorarase a asistencia ás clases.	10
Essay questions exam	(*)Avaliaranse os coñecementos adquiridos durante o desenvolvemento da materia.	60

Other comments on the Evaluation

Sources of information

Basic Bibliography

Sánchez, Antoni, **De residuo a recurso**, 1, Mundi Prensa, 2014

Gil, Manuel, **Depuración de aguas residuales**, 1, CSIC, 2013

Seoanez, Mariano, **Manual de aguas residuales industriales**, 1, Mac Graw Hill, 2012

Picoraio, Simona, **Gestión de residuos Urbanos**, 1, CEYSA, 2016

Seoanez, Mariano, **Tratado de la contaminación atmosférica**, 1, Mundi Prensa, 2012

Complementary Bibliography

Recommendations