

SUBJECT TEACHING GUIDE

G1636 - European Project Semester EPS

Degree in Chemical Engineering

Academic year 2019-2020

1. IDENTIFYING DATA			
Degree	Degree in Chemical Engineering	Type and Year	Optional. Year 4
Faculty	School of Industrial Engineering and Telecommunications		
Discipline	Subject Area: Option D: European Project Semester Optional Module		
Course unit title and code	G1636 - European Project Semester EPS		
Number of ECTS credits allocated	30	Term	Semester based (2)
Web			
Language of instruction	English	Mode of delivery	Face-to-face

Department	DPTO. INGENIERIAS QUIMICA Y BIOMOLECULAR
Name of lecturer	INMACULADA ORTIZ URIBE
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Other lecturers	RAQUEL IBAÑEZ MENDIZABAL CLARA CASADO COTERILLO EUGENIO BRINGAS ELIZALDE ANTONIO DOMINGUEZ RAMOS GABRIEL ZARCA LAGO

3.1 LEARNING OUTCOMES

-- Those corresponding to the following matters, G787 Advanced Separation processes
 G795 Wastewater Treatment G799 Life Cycle Assessment
 - Development of a group project where chemical engineering fundamentals (mass balances, energy balances, process kinetics...) are integrated for the optimum design of one of the following topics
 * CO2 capture and recovery. Impact on climate change
 *New water sources: Wastewater regeneration and reuse
 *Desalination processes: source of water and chemicals "
 "Application of biotechnology to environmental and industrial processes" "Polymers and new materials"
 "Renewable energy sources: Photovoltaic, Fuel cels... "Industrial effluents as a source of value added products "
 "Chemical and biomolecular engineering: purification of biomolecules, tissue engineering" etc
 - Development of an individual project where chemical engineering fundamentals (mass balances, energy balances, process kinetics...) are integrated for the optimum design of one of the following topics
 * CO2 capture and recovery. Impact on climate change
 *New water sources: Wastewater regeneration and reuse
 *Desalination processes: source of water and chemicals "
 "Application of biotechnology to environmental and industrial processes" "Polymers and new materials"
 "Renewable energy sources: Photovoltaic, Fuel cels... "Industrial effluents as a source of value added products "
 "Chemical and biomolecular engineering: purification of biomolecules, tissue engineering" etc Oral and written presentation

4. OBJECTIVES

Integrate the fundamentals of chemical engineering disciplines for the optimum design of environmental and industrial processes working both in
 Multidisciplinary groups on a selected topic from the offered list as well as the development of an individual project on a selected topic.

6. COURSE ORGANIZATION

CONTENTS

1	G787 Advanced Separation processes G795 Wastewater Treatment G799 Life Cycle Assessment
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7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
20%	Others	No	Yes	20,00
20%	Others	No	Yes	20,00
20%	Others	No	Yes	20,00
40%	Others	No	No	40,00
TOTAL				100,00
Observations				
The final mark will be obtained as the weighted average of the marks of the individual disciplines				
Observations for part-time students				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

For the reference list please go to the individual guides of the disciplines G787, G795, G799 and G811