



1. General information

Course: PLANNING, LOGISTICS AND INDUSTRIAL ORGANIZATION
Type: CORE COURSE
Degree: 2336 - MASTER DEGREE PROGRAM IN CHEMICAL ENGINEERING
Center: 1 - FACULTY OF SCIENCE AND CHEMICAL TECHNOLOGY
Year: 1

Code: 310749

ECTS credits: 6

Academic year: 2023-24

Group(s): 20

Duration: C2

Second language: English

English Friendly: Y

Bilingual: N

Main language: Spanish

Use of additional languages:

Web site:

Lecturer: FRANCISCO JESUS FERNANDEZ MORALES - Group(s): 20				
Building/Office	Department	Phone number	Email	Office hours
ITUJIMA / 1	INGENIERIA QUIMICA	926 05 21 79	fcojesus.fmorales@uclm.es	Monday to Friday, 9:00 to 10:00
Lecturer: JUAN RAMON TRAPERO ARENAS - Group(s): 20				
Building/Office	Department	Phone number	Email	Office hours
Margarita Salas/ 304	ADMINISTRACIÓN DE EMPRESAS	926052446	juanramon.trapero@uclm.es	Monday to Friday, 10:00 a 11:00

2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

The subject Planning, logistics and industrial organization is justified due to the need to provide students with advanced knowledge of industrial planning and logistics. In addition, this subject serves to deepen the knowledge of industrial organization, an area in which

With this subject, students will acquire knowledge about the main strategic aspects of the Industry.

4. Degree competences achieved in this course

Course competences	
Code	Description
CB06	To possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context
CB08	To be able to integrate knowledge and deal with the complexity of making judgements on the basis of incomplete or limited information, including reflections on the social and ethical responsibilities linked to the application of their knowledge and judgements
CB09	To be able to communicate their findings, and the ultimate knowledge and reasons behind them, to specialist and non-specialist audiences in a clear and unambiguous manner
E07	To manage and organize companies, as well as production and service systems, applying knowledge and skills in industrial organization, commercial strategy, planning and logistics, commercial and labor legislation, financial and cost accounting.
E08	To direct and manage the organization of work and human resources applying criteria of industrial safety, quality management, prevention of occupational risks, sustainability, and environmental management.
E10	To adapt to structural changes in society caused by factors or phenomena of an economic, energy or natural nature, in order to solve the resulting problems and provide technological solutions with a high commitment to sustainability.
G08	To lead and define multidisciplinary teams capable of solving technical changes and management needs in national and international contexts
G11	To possess the skills of autonomous learning in order to maintain and improve the competences of chemical engineering that allow the continuous development of the profession
MC1	To have acquired advanced knowledge and demonstrated an understanding of the theoretical and practical aspects and of the working methodology in the field of Chemical Engineering with a depth that reaches the forefront of knowledge
MC2	To be able, through arguments or procedures developed and supported by themselves, to apply their knowledge, understanding and problem-solving skills in complex or professional and specialized work environments that require the use of creative or innovative ideas
MC3	To have the ability to collect and interpret data and information on which to base their conclusions including, where necessary and relevant, reflection on social, scientific or ethical issues in the field of chemical engineering
MC4	To be able to deal with complex situations or those that require the development of new solutions in the academic, work or professional field of study of Chemical Engineering
MC5	To know how to communicate to all types of audiences (specialized or not) in a clear and precise way, knowledge, methodologies, ideas, problems and solutions in the field of the study of Chemical Engineering
MC6	To be able to identify their own training needs in the field of study of Chemical Engineering and work or professional environment and to organize their own learning with a high degree of autonomy in all kinds of contexts (structured or unstructured).

5. Objectives or Learning Outcomes

Course learning outcomes
Description
To have skills in the management and organization of work and human resources
To understand the importance of the integrative nature of supply chain management and its practical contributions
To know the link between the general strategy of the company and the processes of supply, production and distribution
To acquire knowledge about the management of the supply chain in all its phases, purchasing, production and physical distribution.
To acquire the necessary skills to carry out the quality management of processes and products
To acquire the necessary knowledge to make decisions in uncertain environments

6. Units / Contents

Unit 1: Inventory management
Unit 2: Supply Chain Management
Unit 3: Workforce Management
Unit 4: Industrial maintenance and reliability
Unit 5: Product selection and design
Unit 6: Process selection and design
Unit 7: Capacity of the production plant
Unit 8: Location of the production plant
Unit 9: Distribution in plant
Unit 10: Decision-making tools

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Combination of methods	CB06 E07 E08 MC1 MC2 MC3 MC6	1.2	30	Y	N	
Workshops or seminars [ON-SITE]	Combination of methods	CB08 E07 E08 G08 G11 MC1 MC2 MC3 MC6	0.6	15	Y	N	
Group tutoring sessions [ON-SITE]	Case Studies	CB06 CB08 CB09 G11 MC1 MC2 MC4 MC6	0.2	5	Y	N	
Final test [ON-SITE]	Combination of methods	CB08 E07 E08 MC1	0.2	5	Y	N	
Project or Topic Presentations [ON-SITE]	Combination of methods	CB09 G11 MC5 MC6	0.2	5	Y	N	
Other off-site activity [OFF-SITE]	Combination of methods	CB06 CB08 CB09 E07 E08 E10 MC1 MC2 MC3 MC4 MC5	3.6	90	N	-	
Total:			6	150			
Total credits of in-class work: 2.4			Total class time hours: 60				
Total credits of out of class work: 3.6			Total hours of out of class work: 90				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Mid-term tests	30.00%	0.00%	
Mid-term tests	30.00%	0.00%	
Projects	15.00%	0.00%	
Portfolio assessment	5.00%	0.00%	
Projects	15.00%	0.00%	
Portfolio assessment	5.00%	0.00%	
Theoretical exam	0.00%	100.00%	
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

9. Assignments, course calendar and important dates	
Not related to the syllabus/contents	
Hours	hours

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
Silver, Edward A.	Inventory and production management in supply chains	CRC Press, Taylor & Francis Group,		978-1-4665-5861-8	2017	
Dominguez Machuca y otros	Dirección de operaciones. Aspectos	Edit. Mac.Graw Hill				
Dominguez Machuca y otros	Dirección de operaciones. Aspectos	Edit. Mac.Graw Hill				
Heizer, J. y Render, B.	Dirección de la producción. Decisiones estratégicas	Edit. Prentice Hall.				
Heizer, J. y Render, B.	Dirección de la producción. Decisiones tácticas	Edit. Prentice Hall.				
Nahmias, Steven	Análisis de la producción y las operaciones	McGraw-Hill		978-970-10-6239-5	2007	
Trapero Arenas, Juan Ramón	Dirección y gestión empresarial	Mc Graw Hill Education		978-84-481-9038-5	2013	