

30171 - Logistics

Syllabus Information

Academic year: 2024/25

Subject: 30171 - Logistics

Faculty / School: 179 - Centro Universitario de la Defensa - Zaragoza

Degree: 563 - Bachelor's Degree in Industrial Organisational Engineering

ECTS: 4.5

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The objective of this subject is for the student to acquire a comprehensive understanding of logistics management in organizations, starting from the concept of supply chain management. By understanding the logistical implications of the various organizational activities, the student will delve into each of the traditional fields of logistics: procurement, storage, distribution, and reverse logistics. For each of these fields, the student will be able to critically analyze different logistics strategies and apply the basic tools commonly used for their design and management.

2. Learning results

1. Know the different areas of the Supply Chain and their interrelationships.
2. Identify key decisions in the purchasing and procurement process.
3. Organize the purchasing and procurement function of the company.
4. Know how to apply supplier evaluation techniques.
5. Classify the company's products by their importance for logistics management.
6. Distinguish the most suitable type of warehouse for each company according to its logistic process.
7. Identify the storage, handling and manipulation systems required in different logistic situations.
8. Organize the basic principles of inventory management to optimize material purchasing decisions.
9. Plan the distribution of a company's materials among its different production and logistics centers.
10. Apply analysis techniques to manage delivery routes.
11. Understand the different processes involved in reverse logistics.
12. Organize reverse logistics processes between the company's production and logistics centers.
13. Know how to apply identification systems in different processes.
14. Identify the technologies necessary to perform the traceability of materials in the company's logistics cycle.

3. Syllabus

Topic 1. Introduction to the supply chain

Topic 2. Procurement needs and supplier management

Topic 3. Storage Types and Design. Handling and handling systems Inventory management.

Topic 4. Warehouse operations. Order preparation

Topic 5. Distribution Planning Route Management Fleet Management

Topic 6. International transactions

Topic 7. Optimization of logistics networks

Topic 8. Reverse Logistics Reverse Logistics Processes. Reverse Logistics Management Models

Topic 9. Information capture and transmission systems. Traceability

4. Academic activities

1. In-person Activities: (45 hours)

- Lectures: Theoretical concepts of the course will be explained, and practical examples will be developed. (31 hours)
- Supervised Group Work and Case Studies: Students will develop examples and solve problems or practical cases in groups related to the theoretical concepts studied. At the end of these activities, students will submit

- a report. Additionally, an oral presentation of the work to their peers may be required. (9 hours)
 - Assessment: (5 hours)
2. Supervised Autonomous Activities: These activities will focus on the completion of group assignments/projects. (9 hours)
 3. Self Study and Personal Work
 4. Tutorials

5. Assessment system

FIRST CALL

Continuous Assessment:

1. Theoretical and Practical Exams (65% of the total grade):
 - There will be two exams (32.5% each) comprising theoretical-practical questions and problems.
 - To pass the grade, the average of the two tests must be equal to or greater than 5.
2. Supervised Assignments (35% of the total grade):
 - Several assignments will be proposed in small groups throughout the course, and an oral presentation may be required.
 - A preliminary task with a maximum weight of 25% of the assignment grade may be required.
 - The evaluation of each assignment will consider the accuracy of the results, the quality of the explanations, the creativity demonstrated by the students, as well as the formal quality of the reports and compliance with the established deadlines.
 - A minimum final grade of 5 out of 10 will be required for each assignment.

Global assessment:

- Students who do not pass the course through continuous assessment or wish to improve their grade have the right to take the comprehensive exam scheduled in the academic calendar, with the highest grade obtained prevailing in any case. This will consist of a written exam and the submission of the directed assignments.

SECOND CALL

Global assessment:

- Students who do not pass the course in the call may take this comprehensive exam. It will consist of a written exam and the submission of the supervised assignments.

In the comprehensive exams, a minimum average grade of 5 must be obtained to pass the course.

ASSESSMENT INSTRUMENTS vs. LEARNING RESULTS (RA)

Instruments	%	RA01	RA02	RA03	RA04	RA05	RA06	RA07	RA08
Theoretical and Practical Exams	65	X	X	X	X	X			X
Open-Ended Questions and Multiple-Choice Exams		X	X	X					X
Problem-Solving Exercises					X	X			X
Supervised Assignments	35						X	X	

6. Sustainable Development Goals

- 9 - Industry, Innovation and Infrastructure
- 11 - Sustainable Cities and Communities
- 12 - Responsible Production and Consumption