

SUBJECT TEACHING GUIDE

617 - Logistics

Master's Degree in civil Engineering, Canal and Port Engineering

Academic year 2025-2026

1. IDENTIFYING DATA					
Degree	Master's Degree in civil Engineering, Canal and Port Engineering			Type and Year	Optional. Year 1
Faculty	School of civil Engineering				
Discipline	CROSS CURRICULAR EDUCATION				
Course unit title and code	617 - Logistics				
Number of ECTS credits allocated	3	Term	Semester based (2)		
Web					
Language of instruction	Spanish	English Friendly	No	Mode of delivery	Face-to-face

Department	DPTO. TRANSPORTES Y TECNOLOGIA DE PROYECTOS Y PROCESOS				
Name of lecturer	JOSE MARIA DIAZ PEREZ DE LA LASTRA				
E-mail	josemaria.diaz@unican.es				
Office	E.T.S. de Ingenieros de Caminos, Canales y Puertos. Planta: + 1. DESPACHO (1007)				
Other lecturers					

3.1 LEARNING OUTCOMES
<ul style="list-style-type: none"> -- Know the basic foundations of the freight transport system, as well as the concept of logistics and its implications - Master the fundamental principles of the supply and physical distribution system, and their application to the civil Engineering

4. OBJECTIVES

- To deepen the comprehension of logistics as an element of competitiveness in the business environment and in civil engineering in particular.
- To deepen the knowledge of supply, production and distribution strategies with a current focus on company-market relationship
- Knowledge of the problems of the management and location of storage activities and introduce the problem of distribution network design

6. SUBJECT PROGRAM

CONTENTS

1	FOUNDATIONS OF LOGISTICS.- The current environment of the company. Guidelines of market. The logistics system. Logistics as a source of competitiveness.
2	LOGISTICS AND PRODUCTION MANAGEMENT. Just in Time. Inventory management. Interactions with supply and distribution systems.
3	THE PURCHASING SYSTEM. The importance of purchases in logistics planning. Decisions on purchases. Search of suppliers. Supplier evaluation and homologation. Negotiation in purchases.
4	THE PHYSICAL DISTRIBUTION SYSTEM.- Physical distribution organization. The concept of total cost. the effect of physical distribution on business organization. Level of service. Introduction to the routing problem.
5	STORAGE ACTIVITY.- Storage policies. Warehousing and Logistics planning. Number and location. Location of warehousing activities.

7. ASSESSMENT METHODS AND CRITERIA

Description	Type	Final Eval.	Reassessn	%
Work	Work	No	Yes	50,00
Exercises and case studies	Others	No	Yes	20,00
Face-to-face activity in the classroom	Others	No	No	30,00
TOTAL				100,00
Observations				
Only for duly justified reasons (e.g. health restrictions), assessment tests may be organised at a distance, with the prior authorisation of the Centre's Management.				
Observations for part-time students				
Part-time students will have to do the Work, the practical exercises and case studies. They will also take a written exam with a weight in the final grade of 30%.				

8. BIBLIOGRAPHY AND TEACHING MATERIALS

BASIC

- Apuntes de la Asignatura
- Ballou, R.H. 1991. Logística empresarial. Ed. Díaz de Santos.
- Ballou, R.H. 2004. Logística. Administración de la cadena de suministro. Ed. Pearson, Prentice Hall.
- O'Grady, P.J. 1992. Just-in-Time. Mc Graw Hill. Madrid.

