

Course Unit	Logistics	Field of study	Management
Bachelor in	Industrial Management and Engineering	School	School of Technology and Management
Academic Year	2023/2024	Year of study	3
Type	Semestral	Semester	1
Workload (hours)	162	Contact hours	T - , TP 60 , PL - , TC - , S - , E - , OT - , O -
Level	1-3	ECTS credits	6.0
Code	9104-754-3104-00-23		

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Carla Alexandra Soares Geraldes

### Learning outcomes and competences

- At the end of the course unit the learner is expected to be able to:
1. define logistics and supply chain management (SCM) and outline how both terms differ from each other;
  2. identify how best practice logistics and supply chain management can yield both cost reduction and value addition;
  3. define the terms integration and collaboration in de SCM context;
  4. define the role of warehousing in contemporary supply chains;
  5. explain storage and materials handling processes within warehouses;
  6. examine warehouse operating and service procedures;
  7. understand the cost structures and operating characteristics of the different transport modes.

### Prerequisites

Before the course unit the learner is expected to be able to:  
Not applicable.

### Course contents

Logistics: evolution and concepts. Supply chain management: integrated planning. Supply chain design. Warehouse management. Transport planning and management.

### Course contents (extended version)

1. Logistics
  - Evolution and definition of logistics and supply chain
  - Importance of logistics / supply chain
2. Supply chain management
  - Integrated planning
  - Supply chain strategies
  - Customer service - logistic product
  - Purchasing process
  - Logistics performance cycles
  - Measuring and managing logistics performances
3. Supply chain design
  - Strategic planning
  - Supply chain designs: postponement, speculation
4. Warehouse management
  - Warehouses
  - Warehouse operations planning
  - Storage and handling systems
  - Operational policies
  - Operational costs
  - Performance measures
5. Transport planning and management
  - Importance of an effective transportation system
  - Characteristics of the different transport modes
  - Transport service selection: decision factors

### Recommended reading

1. Geraldes, C. A. S. , Notas de Apoio, 2022
2. Crespo de Carvalho, J. M. , Logística e Gestão da Cadeia de Abastecimento, Edições Silabo, 2020.
3. Ballou, R. H. , Business Logistics/Supply Chain Management, Prentice-Hall, 2004.
4. Bramel, J. , Simchi-Levi, D. , The logic of logistics, Springer.
5. Christopher, M. , Logistics and Supply Chain Management: strategies for reducing costs and improving services, Pitman Publishing, 2002.

### Teaching and learning methods

To encourage student learning and support the achievement of the programme outcomes the theoretical part of the course is taught primarily by lectures supported by classes and tutorials. Some case studies are also used.

### Assessment methods

1. Continuous assessment - (Regular, Student Worker) (Final)
  - Case Studies - 60% (Three case studies will be discussed and analysed (in the classroom).)
  - Final Written Exam - 40% (To be held in January.)
2. Final assessment - (Regular, Student Worker) (Final, Supplementary, Special)
  - Final Written Exam - 100%

### Language of instruction

Portuguese, with additional English support for foreign students.

## Electronic validation

Carla Alexandra Soares Gerales	José Mário Escudeiro de Aguiar	António Jorge da Silva Trindade Duarte	José Carlos Rufino Amaro
05-10-2023	07-10-2023	09-10-2023	10-10-2023