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|---|--|---------------|----------------|--|-----|
| Course Unit   | International Operations and Logistics |               | Field of study | Management   |     |
| Bachelor in   | International Business Management      |               | School         | School of Technology and Management                        |     |
| Academic Year   | 2023/2024                              | Year of study | 2              | Level  | 1-2 |
| Type  | Semestral                              | Semester      | 1              | ECTS credits   | 6.0 |
| Workload (hours)  |  | 162           | Contact hours  | T -    TP 50    PL -    TC -    S -    E -    OT 10    O - |     |
| <small>T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other</small> |  |               |                |  |     |

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

### 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 to plan, organize and control the logistics activities for successful SCM in any organization
3. set the level of the logistics activities so as to make products and services available to customers at the time, place, and in the condition and form desired, in the most cost-effective manner
4. identify inventory reduction strategies
5. define the role of warehousing in contemporary supply chains. Examine warehouse operating and service procedures. Explain storage and materials handling processes within warehouses
6. understand the cost structures and operating characteristics of the different transport modes
7. understand and identify the bundle of decisions involved in the strategic and integrated planning of international logistic systems
8. identify the factors which affect the logistic strategic planning and to know which is its trend in different markets

### Prerequisites

Before the course unit the learner is expected to be able to:  
demonstrate knowledge in Statistics

### Course contents

Logistics: evolution and concepts. Logistics/supply chain strategy. Supply chain management: integrated planning and Supply chain design. Warehouse management. Inventory 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
  - Supply chain strategy
  - Integrated planning
  - Customer service - logistic product
  - Supply chain designs: postponement, consolidation and standardization
  - Distribution channels
3. The logistics/supply chain product and the logistics/supply chain customer service
  - Impact of product characteristics on supply chain
  - Impact of Logistics/supply chain customer service on supply chain
4. Warehouse management
  - Warehouses functions
  - Warehouse operations planning
  - Storage and handling systems
  - Operational policies
  - Operational costs
  - Performance measures
5. Inventory management
  - The role of inventory management
  - Costs relevant to inventory management
  - Inventory control methods: Reorder Point Control and Periodic Review Control
  - Single and joint ordering
  - Purchasing and supply scheduling decisions
6. Transport planning and management
  - Importance of an effective transportation system
  - Characteristics of the different transport modes
  - Transport service selection: decision factors
  - Transport costs
  - Vehicle routing and scheduling methods at tactical and operational levels
7. Logistics network planning
  - Costs relationships and trade-off analysis
  - Facility location decisions

### Recommended reading

1. Ballou, R. H. (2004). Business Logistics/Supply Chain Management (5th Edition), Prentice-Hall International, Inc.
2. Ghiani, G. , Laporte, G. , Musmanno, R. (2004). Introduction to Logistics Systems Planning and Control, John Wiley & Sons, Ltd.
3. Rushton, A. , Croucher, P. , Baker, P. (2017) ; The Handbook of Logistics and Distribution Management (6th Edition); Kogan Page Ltd.

### Teaching and learning methods

To encourage student learning and facilitate the achievement of the programme outcomes the course is taught primarily by theoretical-practical lectures supported by cases studies and solving practical exercises.

Assessment methods

1. Evaluation I - (Regular, Student Worker) (Final)

- Practical Work - 20% (Preparation, presentation and discussion of practical work (in the classroom).)

- Intermediate Written Test - 40% (Multiple-choice midterm exam.)

- Final Written Exam - 40% (To be held at the end of the semester.)

2. Evaluation II - (Regular, Student Worker) (Final, Supplementary, Special)

- Final Written Exam - 100%

Language of instruction

English

| Electronic validation          |                                |                            |                          |
|--------------------------------|--------------------------------|----------------------------|--------------------------|
| Carla Alexandra Soares Gerales | José Mário Escudeiro de Aguiar | Nuno Filipe Lopes Moutinho | José Carlos Rufino Amaro |
| 05-10-2023                     | 07-10-2023                     | 09-10-2023                 | 10-10-2023               |