INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	International Operations and Logistics			Field of study	Management		
Bachelor in	International Business Management			School	School of Technology and Management		
Academic Year	2022/2023	Year of study	2	Level	1-2	ECTS credits	6.0
Type	Semestral	Semester	1	Code	8487-711-2106-00-22		

Workload (hours)	162	Contact hours	T -	TP 50	PL -	TC -	S -	E -	OT 10	O -

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 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-pratical lectures supported by cases studies and solving pratical exercices.

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 III - (Regular, Student Worker) (Final, Supplementary, Special)
   - Final Written Exam - 100%

Language of instruction

English

Electronic validation

Carla Alexandra Soares Geraldes	António Jorge da Silva Trindade Duarte	Nuno Filipe Lopes Moutinho	Paulo Alexandre Vara Alves
30-09-2022	11-10-2022	24-10-2022	05-11-2022