VNIVERSITAT DE VALÈNCIA

Course Guide
35905 Global management of supply and production

COURSE DATA

DATA SUBJECT

Code: 35905
Name: Global management of supply and production
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1314 - Degree in International Business	Facultat d'Economia	4	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1314 - Degree in International Business	Production and supply	ELECTIVES

COORDINATION

BOTELLA ANDREU ANA

SUMMARY

Globalization is a phenomenon that involves both production and logistics operations, and consumption. Customers, suppliers and consumers in a country are different from those of other countries, as well as transportation, inventory, warehousing, distribution and communication systems, which differ to meet specific business environments.

The global context poses additional complexity in the form of extensive supply chains where, for example, a company develops a new product in the United States, inputs and production are located in Asia, and the distribution and marketingare performed in the United States , Asia and Europe.

Therefore, the creation and management of global supply chains means that the supply, production and distribution should consider the differences and similarities between different markets to set synergies in production, transportation, inventory, storage, and distribution systems communication.

Some of the central themes of this course are summarized in the following:

- Introduction to overall management of the supply chain and production.
  supply chain concept from operations and strategy.
- Product design and logistics associated with the product.
- Processes, systems strategies and production planning.

- New models of production and supply of multinational corporations
  Overall management of logistics and warehouses.
  The overall planning and management of transportation and distribution.
- New challenges: global management of supply and production in relation to the
  R & D, and the Social Responsibility of the company.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

There are no specified enrollment restrictions with other subjects of the curriculum, although it would be advisable to have studied the subjects in this same area, "Cross Cultural Management" and "International Business Management".

COMPETENCES / LEARNING OUTCOMES

1314 - Degree in International Business

Be able to generate ideas and detect business opportunities in international markets.

Conocer el funcionamiento de los sistemas de producción just in time y los problemas que plantea su aplicación.

Conocer las diferencias entre los sistemas de producción europeos, norteamericano y asiático.

Conocer los distintos criterios para el outsourcing y / o la relocalización internacional de las actividades de producción.

Conocer los parámetros fundamentales para el diseño de los sistemas de producción.

Dominar el concepto y las estrategias de abastecimiento global y sus diferencias respecto de otros sistemas de aprovisionamiento.

Dominar las herramientas y criterios para la selección de proveedores y de los países de aprovisionamiento para la empresa.

Know and coordinate the different elements of the global value chain, from procurement to delivery.

Manage relations between the parent companies of multinationals and their subsidiaries.

Manage the design, coordination and control mechanisms of the company's international strategy.

Ser capaz de manejar el software de compra para un aprovisionamiento global.

Ser consciente del impacto de las actividades productivas sobre el medio ambiente y mantener una actitud de sostenibilidad.

Understand the structure and functioning of companies and organisations operating in an international context.

DESCRIPTION OF CONTENTS

1. INTRODUCTION TO GLOBAL MANAGEMENT OF THE SUPPLY AND THE PRODUCTION

1.1. Introduction. Basic concepts associated with the global management of supply and production.
1.2. Types of Logistics. Evolution of logistics towards the Supply Chain.
1.3. Globalization of the operational activities of the value chain.

2. MANAGEMENT AND OBJECTIVES OF THE SUPPLY CHAIN

2.1. Global direction of the supply chain.
2.2. Activities of planning and relation with the rest of operative functions.
2.3. Process management in the supply chain.
2.4. Performance guidelines and metrics for logistics and the supply chain

3. SUPPLIER MANAGEMENT AND PROCUREMENT SUBSYSTEM

3.1. The function of purchases and supplies. Goals.
3.2. The purchasing department, basic activities and purchasing processes.
3.3. Evaluation of suppliers and supply strategies.
3.4. Segmentation of the sources of supply. Local and global supply of simple components and complex components.

4. STORAGE SUBSYSTEM AND INVENTORY MANAGEMENT

4.1. Inventories, concept and types. Factors that affect the creation of inventories.

4.2. Control and management of stocks. Inventory management systems with independent demand.
4.3. Design and organization of warehouses. Warehouse distribution (layout). Storage systems.
4.4. Maintenance and handling of goods. Picking and preparation of orders. Packing and expedition (Packing).
4.5. Decisions on storage and its relationship with logistics.

5. PRODUCTION SUBSYSTEM

5.1. Production systems Production capacity and distribution in plant
5.2. Production planning systems according to time frame. MRP
5.3. Production systems and their relationship with logistics and supply: Just in Time, Kanban and slender production.
5.4. Changes in the productive model with globalization. Outsourcing, Offshoring and Nearshoring

6. TRANSPORTATION AND DISTRIBUTION SUBSYSTEM

6.1. Fundamentals of transport. Types and modalities of transport, characteristics and costs.
6.2. The distribution process. Conventional commercial distribution systems.
6.3. Commercial distribution and electronic commerce
6.4. Planning systems for commercial distribution according to timeframe: DRP (Distribution Resource Planning) systems.

7. SYSTEMS AND INFORMATION TECHNOLOGIES IN LOGISTICS

7.1. Logistical information and its computer processing. Coding systems for products and materials. Radio Frequency Identification (RFID). Traceability.
7.2. Systems and technologies of logistics information and the supply chain. ERP (Enterprise Resource Planning) systems.
7.3. Specialized information technology and systems (Best of Bread systems) for logistics and supply chain.
7.4. Digitization and development in the cloud. Industry 4.0 and logistics 4.0.
7.5. Sustainable logistics and the sustainable development goals (O.D.S. 2030).

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Classroom practices	30,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	30,00
Independent study and work	30,00
Preparation of lessons	30,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	**90,00**

TEACHING METHODOLOGY

Time **theory sessions** will be distributed in the following sections:

a) A descriptive part by the teacher, who will develop the theoretical concepts contained in the course syllabus (80% time)
b) A descriptive part by students who have investigated and expanded some relevant aspect within the agenda of theory, proposed by the teacher (10% time)
c) Discussion and class participation on theory concepts seen in this session, both taught by the teacher and presented by the students (10% of the time).

In the **practical sessions** students will develop and present the analysis and resolution (individual and group as appropriate) of the exercises, cases, and readings that were proposed

Teaching and support materials: in the VIRTUAL CLASSROOM be published all necessary materials, both support transparency theoretical sessions and practical materials are accurate.

EVALUATION

- 70% of the total evaluation corresponds to the theory part, and the remaining 30% to the practical part.
- The theoretical part is evaluated by means of a written development exam with a series of theoretical-practical questions of limited extension
- The practical part is evaluated by the continuous evaluation system, considering attendance, participation and resolution of cases and exercises.

Policy for the use of Artificial Intelligence (AI) in class

Learning to use AI is an emerging skill, but certain limits of AI must be kept in mind, such as the following:

- If minimal effort prompts are provided, very low-quality results will be obtained. You will have to refine the prompts to get good results. Therefore, this requires work.
- Take responsibility for any errors or omissions provided by the tool, and always check the sources.
- AI is a tool, so think carefully about when it is useful. It should not be used if it is not appropriate to the case or circumstance.
- **A paragraph should be included at the end of any task that uses Artificial Intelligence, explaining what it has been used for and what instructions have been applied to obtain the results. Failure to do so will violate the academic honesty policy and will be considered plagiarism. In fact, according to article 11.g of Law 3/2022, of February 24th, on university coexistence, regarding ChatGPT, it shall be considered a very serious offense to fully or partially plagiarize a work, or engage in academic fraud in the preparation of any assignment or activity requested of the students. Academic fraud shall be understood as any deliberate behavior aimed at falsifying the results of an exam or assignment, whether it is one's own or someone else's (including the improper use of artificial intelligence such as ChatGPT), carried out as a requirement to pass a subject or demonstrate academic performance.**

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