Syllabus
2025 - 2026

TECHNICAL SHEET OF THE SUBJECT

Data of the subject	
Subject name	Supply Chain Management
Subject code	E000011753
Mainprogram	Bachelor's Degree in Business Administration and Management
Involved programs	Grado en Administración y Dirección de Empresas y Grado en Análisis de Negocios/Business Analytics [Fourth year]
Level	Reglada Grado Europeo
Quarter	Semestral
Credits	6,0 ECTS
Type	Optativa (Grado)
Department	Departamento de Gestión Empresarial
Coordinator	Lucía Barcos Redín; Enrique Díaz-Plaza Sanz
Schedule	Consult for this purpose the schedules of the different groups in which it is taught.
Office hours	Request an appointment by email
Course overview	ANECA: Detail in the knowledge and understanding of the keys to supply chain management in a global context. In a first part, it is exposed concepts about the business logistics system and logistics functions in the supply chain. In a second part, the logistics functions of supplies, production and physical distribution. Next, concepts referring to logistics strategies in the supply chain, considering the opportunities and threats arising from the international dimension of operations (eg exploitation of the advantages derived from the most efficient location of supplies and warehouses). Add the reflection on the bullwhip effect as source of inefficiencies in the supply chain and collaborative relationships between companies in the chain. Finally, concepts on the applications of information technologies in logistics management of the supply chain (ERP and SCM).

Teacher Information

Teacher	
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SPECIFIC DATA OF THE SUBJECT

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Contextualization of the subject

Contribution to the professional profile of the degree

The course develops the knowledge and understanding of the more important elements of supply chain management in a global context. Concepts about logistics functions, manufacturing and physical distribution together with concepts related to supply chain strategies , considering the opportunities and threats derived from the international dimension of operations.

Prerequisites

Knowledge of Statistics and Business Management.

Competencies - Objectives

Competences

GENERALES

CG2	Capacidad de gestionar información y datos provenientes de fuentes diversas para hacer un análisis crítico y un correcto diagnóstico de la realidad empresarial.	
	RA1	A partir de la información y datos obtenidos de fuentes diversas, identifica problemas empresariales determinando, el origen/las causas de losmismos.
	RA2	Es capaz de realizar dicho proceso de diagnóstico dando y recibiendo feed-back de forma asertiva, que ayude a incrementar la integración y la confianza en los equipos de trabajo
CG3	Capacidad para la resolución de problemas y toma de decisiones empresariales seleccionando y aplicando adecuadamente las técnicas pertinentes de análisis de datos	
	RA1	Identifica, captura y analiza de forma eficiente datos de fuentes primarias y secundarias que sean necesarios para el análisis del entorno competitivo de la empresa
	RA2	Aplica los conceptos matemáticos y técnicas cuantitativas y cualitativas de análisis de datos necesarios para la resolución de problemas empresariales y apoyar el diagnóstico y toma de decisiones en la empresa.
CG5	Desarrollar habilidades interpersonales que refuercen el aprendizaje de un trabajo autónomo, bien organizado y planificado y que esté orientado a la acción y a la calidad.	
	RA1	Desarrolla habilidades académicas, interpersonales e instrumentales necesarias para la investigación independiente, relacionando los conocimientos adquiridos con las distintas aplicaciones profesionales o prácticas reales
CG8	CG8 Reforzar la capacidad de gestión del cambio que apoye la transformación digital de la sociedad contemporánea con Tecnologías de la Sociedad de la Información, nuevas formas de organización del trabajo y nuevos modelos de negocio.	
	RA1	Identifica necesidades y recursos tecnológicos a la hora de resolver problemas conceptuales y técnicos a través de medios digitales

	RA2	Se comunica eficazmente y de manera proactiva en entornos digitales, compartiendo recursos a través de herramientas en línea, colaborando con otros a través de herramientas digitales, e interactuando en comunidades y redes profesionales
ESPECÍFICAS DE OPTATIVIDAD		
CEOPT2(PL)	Conocimiento y comprensión de la gestión de la cadena de suministro	
	RA1	Saber coordinar las actividades de proveedores y clientes dentro de la cadena de suministro, consciente de su repercusión en la eficacia y eficiencia.
	RA2	Saber cómo emplear las tecnologías de información y comunicación para la mejora de la calidad del servicio en la transferencia de productos.
	RA3	Incorporar en la gestión la dimensión ética de la cadena de suministro.

THEMATIC BLOCKS AND CONTENTS

Contents - Thematic Blocks

Topic 1: Introduction to the Supply Chain

Definition, scope, evolution, and trends of the supply chain. Decision levels. Decision-making, performance indicators, and sustainability in the supply chain.

Topic 2: Strategic Sourcing

Key concepts of strategic sourcing. Overall strategy and sourcing models. Risk management in strategic sourcing. Analytics, innovation, and future trends.

Topic 3: Inventory Management

Basic concepts of inventory management. Inventory management models. Indicators related to inventory management. Technology and analytics applied to inventory management

Topic 4: Demand Forecasting and Demand Management

Basic concepts, definition, and scope of demand forecasting and demand management. The bullwhip effect. Forecasting methods and approaches. Measurement and evaluation of forecast accuracy. Collaborative forecasting.

Topic 5: Transportation, Logistics, and Physical Distribution

Basic concepts of logistics and physical distribution. Supply chain network design and location decisions. Transportation systems, analytics and applied technologies. Internal logistics operations. Sustainability and resilience.

TEACHING METHODOLOGY

General methodological aspects of the subject

The activities included in both the in-class and non-presential methodology are detailed below. In general terms, all course activities will

promote a responsible and critical use of artificial intelligence tools such as ChatGPT. Following the classification proposed by Perkins et al. (2024), a level 3 integration is adopted, which means that students may use these tools to support tasks such as analysis, scenario exploration, idea testing, text reformulation, and style checking; all in combination with their own academic judgment and traditional bibliographic sources, validating and justifying the results. The final outcome must reflect the personal work of the group or the individual student. AI may act as an assistant, but it must not replace analytical skills, critical judgment, or the development of original content. Students will be required to be transparent in declaring their use of AI. The aim is not to substitute human reasoning, but rather to enrich the learning process and enhance analytical competencies in Supply Chain through an ethical, critical, and reflective use of these technologies.

In-class Methodology: Activities

1. Lectures, in which the instructor will present the main contents in a clear, structured, and engaging manner, generally supported by multimedia resources. Key aspects will be outlined to guide students' learning process, while encouraging and considering student suggestions.

2. Practical classes, where the instructor introduces basic concepts with active student participation through discussions and debates aimed at deepening content comprehension. These sessions will include dynamic presentations and both regulated and spontaneous student involvement through various activities.

3. Analysis and resolution of practical cases proposed by the professor, enabling students to apply the knowledge acquired. In general, these cases will be based on real-world situations and problems.

4. Presentations of specific topics or cases, involving the presentation and defense of cases before the class and instructor. These may be carried out individually or in teams. Evaluation will consider conceptual organization, subject knowledge, clarity of presentation, respect and consistency throughout all stages, and—in the case of group work—the active collaboration of all team members.

5. Tests and examinations, including different types of assessments: written exams on course content, practical tests linked to in-class or follow-up activities, short quizzes to verify the assimilation of general or specific concepts, as well as exercises or assignments that may be completed entirely in class or as complementary preparation or follow-up outside the classroom.

Non-Presential Methodology: Activities

1. Independent study and review of course materials, aimed at understanding, reworking, and assimilating scientific content with a focus Syllabus on practical application. This includes individual reading of texts and materials (books, reviews, articles, press releases, online documents, cases, etc.) related to the course. All materials and guidelines are available on the course website.

2. Analysis and resolution of practical cases.

3. Assignments and practical exercises, to be completed individually or in groups.

4. Individual or group academic tutoring, aimed at resolving questions or difficulties that may arise during the learning process.

SUMMARY STUDENT WORKING HOURS

CLASSROOM HOURS		
Lecciones de carácter expositivo	Ejercicios y resolución de casos y de problemas	Exposición pública de temas o trabajos
35.00	20.00	5.00
NON-PRESENTIAL HOURS		
Estudio individual y/o en grupo y lectura organizada	Trabajos monográficos y de investigación, individuales o colectivos	Ejercicios y resolución de casos y de problemas
30.00	30.00	30.00
		ECTS CREDITS: 6,0 (150,00 hours)

EVALUATION AND CRITERIA

The use of AI to produce full assignments or substantial parts thereof, without proper citation of the source or tool used, or without explicit permission in the assignment instructions, will be considered plagiarism and therefore subject to the University's General Regulations.

Evaluation activities	Evaluation criteria	Weight
Final Exam	The final exam will assess both theoretical and practical knowledge. A minimum grade of 4.0 out of 10 is required for the exam to be considered in the weighted average with the other assessment components and in order to pass the course.	50 %
Active Participation in class	A positive attitude towards the course will be assessed, taking into account aspects such as attendance and active participation in class, interest shown in the subject, submission of exercises, completion of quizzes/Kahoots, etc.	10 %
Group Assignments/projects	Teamwork and practical application of theory. The improper use of generative artificial intelligence (e.g. ChatGPT) will be subject to sanction. See NOTE on this matter below	20 %
Individual Assessments	Students will complete one or more intermediate tests/assessments, in which they must individually demonstrate the acquisition of the required knowledge	20 %

Ratings

ASSESSMENT IN THE ORDINARY EXAM SESSION

The final grade of the course will be calculated by applying the weighting criteria of the different assessment activities indicated previously. In order to pass the course, students must achieve a weighted total of at least 5.0 out of 10. As also specified above, obtaining a grade lower than 4.0 out of 10 in the Final Exam will result in the non-application of the weightings of the other assessment activities. In such a case, the final grade for the course will be the grade obtained in the Final Exam.

ASSESSMENT IN THE EXTRAORDINARY EXAM SESSION

Students who fail the ordinary exam session, as well as those exempt from regular attendance, repeating students, exchange students, or students undertaking approved internships authorized by the corresponding Academic Directorate, will only take a theoretical-practical exam. The final grade for the course will be the grade obtained in this theoretical-practical exam, with a minimum of 5.0 out of 10 required to pass.

NOTE ON THE MISUSE OF GENERATIVE ARTIFICIAL INTELLIGENCE IN ALL ASSESSMENT ACTIVITIES

The improper, uncritical or excessive use of artificial intelligence tools, without providing personal review, reflection, or academic justification, may be considered a breach or fraud within the assessment system and may negatively affect the final grade. See also the "General methodological aspects of the subject" subsection.

In accordance with the University's General Regulations, Article 168.2.e, it is considered a serious offense to engage in "actions intended to falsify or defraud academic performance assessment systems." The consequences of such misconduct include "temporary expulsion of up to three months or prohibition from taking exams in the following exam session after the sanction is imposed, in one or several courses in which the student is enrolled, [...] in addition to receiving a failing grade (0) in the respective course, [...] and prohibition from sitting the exam for that course in the following session."

BIBLIOGRAPHY AND RESOURCES

Basic Bibliography

CHOPRA, S.(2018) "Supply Chain Management: Strategy, Planning, and Operation" 7th ed. Pearson.

HEIZER J.; RENDER, B., MUNSON, C. (2023). Operations Management: Sustainability and Supply Chain Management (14th Edition). Pearson
JACOBS, F.R.; , CHASE, R.B. (2021). Operations and Supply Chain Management.(16th Edition). McGraw Hill.
KRAJEWSKI, L.J.; MALHOTRA, M.K.; RITZMAN, L.P. (2018). Operations Management: Processes and Supply Chains (12th Edition). Pearson.
LEPORATI, M., MARTUL VÁZQUEZ, L., MORALES CONTRERAS, M.F. (2021). GLOBAL SUPPLY CHAIN. An integrative View. Ed. Thomson Reuters, Aranzadi.

Complementary Bibliography

Perkins, M., Furze, L., Roe, J., & MacVaugh, J. (2024). The Artificial Intelligence Assessment Scale (AIAS): A Framework for Ethical Integration of Generative AI in Educational Assessment. Journal of University Teaching and Learning Practice, 21(6). https://doi.org/10.53761/q3azde36