Universidad de Navarra

Logistics and Supply Chain

Teaching guide 2026-27

PRESENTATION

Logistics and Supply Chain explores how goods, services, and information move efficiently across today's global markets. The course provides students with a practical understanding of supply chain operations, from procurement and production to distribution and customer delivery, while examining the strategic decisions that underpin competitiveness and sustainability. Through real-world case studies, simulations, and applied exercises, students will develop the analytical and problem-solving skills required to address contemporary logistical challenges in dynamic business environments.

- **Degree**: International Degree of Management, Global Management and Law Double Degree
- **"Módulo"/"Materia"** : 7. Optativa / 7.1. Optativa General
- **ECTS**: 6
- **Course, semester**: 3rd, 4th, 5th, 6th - First semester
- **Subject**: Elective
- **Professor**: Anna Dulska Ph.D.
- **Language**: English
- **Timetable**: Monday, 8:00am - Room 005 Amigos Building; Friday 8:00am Room 004 Amigos Building

LEARNING OUTCOMES (Competencies)

BASIC COMPETENCIES

BC2. Students must know how to apply their knowledge to their work or vocation in a professional way and must have the competences that are usually demostrated by means of preparing and defending arguments and solving problems within their area of study.

BC3. Students must have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific and ethical topics.

BC4: Students must be able to transmit information, ideas, problems and solutions to specialized and general audiences.

BC5: Students must develop the learning skills required to undertake subsequent studies with a high level of independence.

General Competencies (Management)

GC2. To identify, integrate and use the knowledge acquired to argue, discuss and solve relevant problems in economics and/or business.

GC4. To use independent critical reasoning on relevant topics in economics and business.

GC5. To communicate results and analysis either orally or in writing that are useful to economics and business.

GC6. To be familiar with the different contexts in which their work is carried out: the circumstances, markets and historical, legal or human context.

GC7. To analyse the process of defining and implementing goals and/or strategies in the company.

GC8. To develop expectations, describe scenarios and make estimates using relevant information for the company.

Specific Competencies

SC9: Understand advanced concepts of operations management

SC16: Apply knowledge, skills, or competencies from the fields of economics and/or business in practical work settings

PROGRAMME

TOPIC 1. Introduction to Logistics

Introduction to the origins and evolution of logistics, from its early applications to its current strategic role in global business operations and supply chain management.

TOPIC 2. Supply Chain Management

Definition and analysis of supply chain management, with particular emphasis on the impact of product characteristics on supply chain design, coordination, and performance.

TOPIC 3. Production Planning

Examination of the different stages of production planning and their relationship with logistics efficiency, operational coordination, and resource management.

TOPIC 4. Procurement and Distribution Logistics

Study of the main concepts, processes, and strategies involved in procurement and distribution activities, including supplier relationships, distribution channels, and service levels.

TOPIC 5. Freight Transport

Analysis of the main modes of freight transport, their operational characteristics, and the economic, environmental, and logistical challenges associated with each of them.

TOPIC 6. Logistics Outsourcing

Overview of the strategic decision to outsource logistics activities, including the role of third-party logistics providers, advantages, risks, and management implications.

TOPIC 7. Inventory Management

Introduction to the role of inventories in supply chains, inventory turnover and coverage indicators, and the main inventory management systems and control techniques.

TOPIC 8. Reverse Logistics

Study of reverse logistics processes and end-of-life product management, including returns, recycling, recovery systems, and key decisions in reverse supply chain management.

The course includes an innovation-in-teaching project entitled: "**Introduction to Space Logistics** " (PID 410), which introduces students to emerging frontiers such as space logistics, a rapidly developing field driven by renewed international space exploration efforts and the growing need for advanced supply chain systems beyond Earth.

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TEACHING ACTIVITIES

Face-to-face activities: 50 hours.

Lectures: 40 hours

In these classes, the most relevant aspects of the topics included in the program are explained. The content of the classes will be provided in advance at ADI, and it is recommended that students attend the classes having previously read this documentation.

Case resolution: 6 hours

Case analysis for the resolution and analysis of real companies, where their logistics decisions and strategies are analyzed.

Visits and sessions with experts: 4 hours.

They will help us to learn about real experiences and professional opportunities in the field of logistics.

Non-face-to-face activities: 95 hours.

Tutorials: 1 hour (individual or group)

Individual work: 94 hours.

Assessment: 5 hours.

ASSESSMENT

- Activity in the classroom – 5%
- Continuous assessment (e.g. quizzes) – 10%
- Group and individual assignments – 20%
- Space Logistics Assignment – 15%
- Final exam – 50 %
- ATTENTION: In both calls (December & June), to pass student must get at least 60% in the final exam and at least 50% of the overall score. In the extraordinary call in June, students may alternatively choose to have their grade based 100% on the final exam.

OFFICE HOURS

Professor José A. Alfaro (jalfaro@unav.es): Available at the beginnig of the course

Dr. Anna Dulska (adulska@unav.es): Office 2040, Institute for Culture and Society (ICS), Ed. Ismael Sánchez Bella, Thursdays 12:00-14:00 CET or by prior arrangement (after the lecture or by sending an email to adulska@unav.es)

BIBLIOGRAPHY AND RESOURCES

Handbooks, piece of news and materials from Harvard Business School Publishing.

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Textbook:

Baisya, Rajat (2024), *Supply Chain and Logistics Management*. New York: Routledge.

Further reading:

Bowersox, Donald J., Closs, David J., and Cooper, M. Bixby (2010) *Supply chain logistics management*. 3rd ed., International ed. New York: McGraw-Hill Higher Education.

Branch, Alan E. (2006) *Export practice and management*. 5th ed. London: Thomson Learning.

Burt, David N., Dobler, Donald W., and Starling, Stephen L. (2003) *World class supply management: the key to supply chain management*. 7th ed., International ed. Boston [Mass.]: McGraw-Hill/Irwin.

Christopher, Martin and Christopher, Martin (2011) *Logistics & supply chain management*. 4th ed. Harlow: Financial Times Prentice Hall.

Christopher, Martin, Christopher, Martin, and MyiLibrary (2011) *Logistics & supply chain management* [electronic resource]. 4th ed. Harlow: Financial Times Prentice Hall. Available at: http://www.myilibrary.com?id=298351.

Flynn, S. (2002) 'America the Vulnerable', *Foreign affairs*, 81(1).

Gourdin, Kent N. (2006) *Global logistics management: a competitive advantage for the 21st century*. 2nd ed. Oxford: Blackwell.

Grainger, A. (2000) 'Customs and international supply-chain issues', *Logistics & transport focus the journal of the Institute of Logistics and Transport*, 2(9). Available at: http://tradefacilitation.co.uk/publications/AGrainger_custscm(2000).pdf.

Grainger, A. (2007) 'Supply chain security: adding to a complex operational and institutional environment', *World Customs Journal*, 1(2).

Jacobs, F. Robert, Chase, Richard B., and Lummus, Rhonda R. (2011) *Operations and supply chain management*. 13th ed., global ed. with global cases and alternate problems. London: McGraw-Hill/Irwin.

Liker & Choi (2004) 'Building deep supplier relationships', *Harvard business review*, 82(12).

Long, Douglas (2003) *International logistics: global supply chain management*. Norwell, Mass: Kluwer Academic Publishers.

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Rice, J. & Caniato, F. (2003) 'Building a secure and resilient supply network', *Supply chain management review*, 7(5).

Rushton, Alan, Croucher, Phil, Baker, Peter, and Chartered Institute of Logistics and Transport in the UK. (2010) *The handbook of logistics & distribution management*. 4th ed. London: Kogan Page.

Rushton, Alan, Croucher, Phil, Baker, Peter, MyiLibrary, *et al.* (2010) *The handbook of logistics & distribution management* [electronic resource]. 4th ed. London: Kogan Page. Available at: http://www.myilibrary.com?id=269738.

Slack, Nigel, Chambers, Stuart, and Johnston, Robert (2010) *Operations management*. 6th ed. Harlow: Financial Times Prentice Hall.

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Tomasini, Rolando M. and Wassenhove, L. N. van (2009) *Humanitarian logistics*. Basingstoke: Palgrave Macmillan.

Tomasini, Rolando M., Wassenhove, L. N. van, and MyiLibrary (2009) *Humanitarian logistics* [electronic resource]. Basingstoke: Palgrave Macmillan. Available at: http://www.myilibrary.com?id=210176.

wal mart case study (no date). Available at: http://www.slideshare.net/Iampinkcrystal/wal-mart-ppt-final.

Womack, J. P. & Jones, D. T. (1994) 'From lean production to the lean enterprise', *Harvard business review*, 72(2).

Wood, Donald F. (2002) *International logistics*. 2nd ed. New York: AMACOM Books.

Wood, Donald F. and ebrary, Inc (2002) *International logistics* [electronic resource]. 2nd ed. New York, N.Y.: AMACOM Books. Available at: http://site.ebrary.com/lib/uon/Doc?id=10120187.