

Introduction to Production Management and Logistic Systems

Course: Production Management and Logistic Systems [10592713]

Economia e management (Latina Campus)

AA 2024-2025 | Prof. Alessandro Pietrogiacomì



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Lesson Plan for Tuesday, March 4

Overview of the course, educational objectives, and program structure

Topic: Introduction to Production Management and Logistics

Time: 10:00–13:00

Duration: 3 hours

Learning Objectives

By the end of this lesson, students will be able to:

- Understand the scope and importance of production management and logistics.
- Familiarize themselves with the course structure, educational objectives, and assessment methods.
- Recognize the relevance of production and logistics in modern business environment

Lesson Outline

1. Welcome and Icebreaker (15 minutes)
2. Overview of Production Management and Logistics (45 minutes)
3. Course Structure and Educational Objectives (45 minutes)
4. Relevance of Production Management and Logistics (45 minutes)
5. Recap and Homework Assignment (15 minutes)

Welcome and Icebreaker

- Welcome students to the course and let me introduce myself <https://www.linkedin.com/in/alexpietrogiacomini/>
- Please introduce yourselves and share your expectations for the course: "What do you hope to learn from this course, and how do you think production management and logistics impact businesses?"

Overview of Production Management and Logistics

Definition and Scope

- 1. Production Management:** The process of planning, organizing, directing, and controlling the production of goods and services
- 2. Logistics:** The management of the flow of goods, services, and information from the point of origin to the point of consumption

Importance in Modern Business

- Enhances efficiency and reduces costs.
- Improves customer satisfaction through timely delivery and quality products.
- Supports competitive advantage by optimizing supply chains and production processes.

Key Concepts

- **Production Systems:** Inputs, processes, outputs, and feedback loops.
- **Supply Chain Management:** Coordination of suppliers, manufacturers, distributors, and customers.
- **Logistics Functions:** Transportation, warehousing, inventory management, and order fulfillment.

Activity #1

- Class discussion: brainstorm examples of industries where production management and logistics play a critical role (e.g., automotive, e-commerce, pharmaceuticals).
- Elaborate responses and discuss the unique challenge

Course Structure and Educational Objectives

Title: Production Management and Logistic Systems.

CFU: 9.

Semester: II.

Modules:

A) Production Module: Conceptual framework, product design, production planning, and quality improvement.

B) Business Logistics Module: Logistics processes, structures, and governance.

C) Organization of Multiplant Companies: Role of production sites, capacity markets, and competitive positioning.

Educational Objectives

- Gain theoretical and practical insights into managing supply chains and production systems.
- Implement concepts in real-world scenarios.
- Develop decision-making skills for business management.
- Enhance ability to communicate effectively.
- Understand and adopt innovations in the business sector.

Teaching Methodology

- Lectures, exercises, case discussions, and guest speakers.
- Use of real-world case studies and practical examples.

Assessment Methods

- Midterm Assessment (30%): Oral exam or group presentations.
- Final Project (40%): Integration of production and logistics concepts.
- Class Participation and Activities (20%): Active involvement in discussions and group work.
- Homework Assignments (10%): Short reports and case study analyses..

Relevance of Production Management and Logistics

Real-World Applications:

Case Study 1: Toyota
Production System (TPS)
– Lean manufacturing and
Just-in-Time (JIT)
principles.

Case Study 2: Amazon's
Logistics Network –
Efficient warehousing and
delivery systems.

Industry Trends

- Automation and Industry 4.0: Use of robotics, IoT, and AI in production and logistics.
- Sustainability: Green logistics and sustainable production practices.
- Digital Transformation: Blockchain, big data, and smart supply chains.

Activity #2

- Group Discussion: Discuss how the (chosen) trend impacts production management and logistics.
- Group Sharing: present your findings to the class.

Recap and Homework Assignment

Key Points

- Importance of production management and logistics in modern business.
- Course structure, objectives, and assessment methods.
- Real-world applications and industry trends.

Homework Assignment

- **Task:** Research a company known for its efficient production or logistics system (e.g., Toyota, Amazon, IKEA, others).
- **Deliverable:** Write a 1-page summary describing the company's system and its impact on its success (send by email by Friday 7 March EOB).