



M.Sc. PROGRAM IN ECONOMIC  
AND BUSINESS STRATEGY



UNIVERSITY OF PIRAEUS  
DEPARTMENT OF ECONOMICS

# CORPORATE RESOURCE PLANNING AND LOGISTICS

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## Course Description

The creation of customer value is a key issue of competitive advantage. At the firm level, the design of the value chain is closely linked with the management of a supply chain. An effective supply chain must be configured to deliver customer value while also maintaining crucial cost advantages. To minimize system-wide costs, firms increasingly rely on new tools for modeling the full supply chain to integrate the firm's logistics and operations. This course introduces students to the concept of value-driven supply chains and its integration with manufacturing and process operations.

The current course will provide a thorough presentation of management of corporate resources and logistics. Topics include physical supply, in-plant movement and storage, and physical distribution that comprise logistics systems in industry. Moreover facility location, transportation, networks, and logistics information systems are examined and analyzed.

## Goals

The ability to identify logistical problems, and create better business solutions using logistics methodologies.

## Requirements and Evaluation

Students are expected to read the assigned material and be prepared to discuss them in class. Moreover, evaluation is based on a project (40%) and its presentation (10%) along with a final exam (50%)

## References

- E.A. Silver, D.F. Payke and R. Peterson (1998), "Inventory Management and Production Planning and Scheduling", John Wiley & Sons, Third

Edition .

- J.J. Coyte, E.J. Bardi and C. J. Langley (1996), "The Management of Business Logistics", West, 6th edition.
- R.E. Truman (1981), «Quantitative Methods for Decision Making in Business», Holf-Saunders International Editions, The Dryden Press.
- N. A. Glaskowski, D.R. Hudson and R.M. Ivie, (1992) "Business Logistics", The Dryden Press.
- Tony Wild (1998) "Best Practice in Inventory Management" John Wiley & Sons.
- C.D. Lewis (1998) "Demand Forecasting and Inventoty Control : A Computer Aided Learning Approach», John Wiley & Sons.
- D.V. Landvater (1997) "World Class Production and Inventory Management", John Wiley & Sons.
- S. Karkalakos (2011), Notes, «CORPORATE RESOURCE PLANNING AND LOGISTICS».

## Tentative Course Schedule

- **Week 1**  
Strategy,  
Logistics Product
- **Week 2**  
Logistic Modelling  
Role and Importance of Logistics in Industry
- **Week 3**  
Inventory Models,  
Variations on Inventory Models,  
Order Processing & Information Systems Transport Fundamentals
- **Week 4**  
Probabilistic Inventory Models,  
Forecasting Logistics Requirements
- **Week 5**  
Inventory Policy Decisions,

Modes and Performance,  
Transport Cost Concepts

- **Week 6**  
Forecasting and Analyzing Inventory Models
- **Week 7**  
Production Systems and Logistics Management
- **Week 8**  
Environmental Aspects of Logistics and Transport
- **Week 9**  
Order Processing & Information Systems  
Output analysis and run-length control
- **Week 10**  
Facility Location Decisions Routing and Scheduling
- **Week 11**  
Network Planning Process
- **Week 12**  
Logistics Organization,  
Logistics Audit & Control / Presentations

100 Things to Do at ACHS