

Production & Logistics II

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Course Objectives

The objective of the course is to cover not only high level supply chain strategy and concepts, but also to give students a solid understanding of the analytical tools to solve supply chain problems.

Knowledge and skills after completing the course

- The strategic importance of good supply chain design, planning, and operation for every firm.
- Identification of inventory, transportation, information, and facilities as the key drivers.
- Knowledge of methodology for all necessary steps by supply chain management.

Course format and teaching methods

The course will be conducted in a mixed form of presenting the main topics, readings, case studies, and discussions. The participants have the opportunity to be active.

Integration of Theory with Practice; Relationship with other Courses

Issues associated with implementing the ideas presented will be discussed as part of every topic. The course is a part of the main knowledge for the MBA-Students in graduate schools of management in the field of business strategy and operations management.

Course content

Key areas:

1. The strategic role of the supply chain
2. Key drivers of supply chain performance
3. Analytical tools and techniques for supply chain analysis

To develop the understanding of this three key areas and their interrelations:

- I. Building a strategic framework to analyze supply chain
Understanding the supply chain, chain drivers and obstacles
- II. Planning demand and supply in supply chain
Forecasting, planning, managing variability
- III. Planning and managing inventories in a supply chain
Managing economies, uncertainty, determining optimal level of product availability
- IV. Transportation, network design, information technology in a supply chain
- V. Coordinating supply chain and the role of e-business
- VI. Financial factors influencing supply chain decisions

Exam

Regularly written exam. In addition written homework and presentation.

Reading list

Chopra, Sunil - Meindl, Peter: Supply Chain Management (Strategy, Planning, and Operation) - Prentice Hall, Upper Saddle River, New Jersey.
Voß, Stefan and D.L. Woodruff: Introduction to Computational Optimization Models for Production Planning in a Supply Chain, Springer, Berlin