



APPLIES TO ACADEMIC YEAR 2012/2013

## GRA 8173 Supply Chain Management

### Programme

Executive Master of Business Administration (EMBA) Program

### Responsible for the course

Lars Huemer, Nils Rudi

### Department

Department of Strategy and Logistics

### Term

According to study plan

### ECTS Credits

4

### Language of instruction

English

### Introduction

Supply chains are emerging as important entities and effective supply chain management is increasingly being seen as a key element of strategy. A main reason for this development is the increasing belief that the nature of competition is shifting towards 'supply chain vs. supply chain' struggles instead of 'firm against firm' competition. Increasingly, supply chains are not merely regarded as a means to get products where they need to be, but also as a means to enhance key outcomes that drive firm performance. Key themes in this course are therefore

This course consists of two main parts. The first part deals with the *Operations* of supply chain, focusing on models for quantitative analysis of parts of the supply chain – and how this relates to the supply chain overall. This includes planning of capacity, challenges of matching demand with supply under uncertainty, and coordination between stages in the supply chain. The second part deals with the *Strategy of supply chains, hereunder* a number of aspects of inter-organizational strategies, including; value creation in and between firms, coordination and positioning in supply chain networks, purchasing and relationship development with suppliers, and global supply chain responsibilities.

### Learning outcome

Traditionally logistics and supply chain management has been seen as primarily operational, which the first part gives a foundation of. This includes concepts of methods for carrying out quantitative analysis of various operational aspects. The second part of the module recognizes the development of supply chain management as an integral element of the study of strategic management. To manage supply chain networks effectively, managers must look beyond the internal view of how their own companies produce goods and deliver services, to include a wider understanding of different business models and strategic perspectives regarding supply chain performance.

### Acquired knowledge:

To understand:

- the role of production capacities, bottlenecks and management
- implications of uncertainty
- impact alternative supply chain configurations
- issues of supply chain coordination
- the traditional focus of supply chains and the implications of the value chain logic
- how value configuration analysis expands the comprehension of both firm level value creation and supply system integration
- how supply chain sustainability and responsibility influence firm strategies
- how trust and power influence supply chain and network strategies

### Acquired skills:

On completion of this module you will be able to:

- analyze capacity and identify bottlenecks
- analyze tradeoffs under uncertainty
- identify challenges and resolutions of supply chain coordination
- analyze shipper and logistics service provider strategies.
- distinguish between conventional supply chain management and the strategic nature of supply chain networks by applying your knowledge of the concepts and methods relating to the creation of value in different supply structures

- understand the role and contribution of logistics and supply chain management to gaining and sustaining competitive advantage from a triple bottom line perspective

#### **Reflection:**

The participants will learn about the complex nature of different supply structures and they will be able to reflect on how different business models may create tradeoffs between supply actors. In particular, the students will be able to reflect on:

- how the various supply chain elements relate and co-exist
- how to match your supply chain with your product offering
- shipper and Logistics Service Provider interactions and strategic tradeoffs
- how supply chain organizations balance short-term profitability and long-term environmental sustainability
- whether focal firms should be accountable for the practices of their suppliers
- competitive advantage through cooperative advantage

#### **Prerequisites**

Granted admission to the EMBA programme.

#### **Compulsory reading**

##### **Books:**

Goldratt, E. and Cox, J.. 1992. The Goal: A process of ongoing improvement. Great Barrington, MA: North River Press.

##### **Articles:**

Fisher, M.L.. 1997. What is the right supply chain for your products?. Harvard Business Review.

Huemer L.. 2012. Unchained from the chain: Supply management from a Logistics Service Provider Perspective. Journal of Business Research

Ireland, R. D and Webb, J. W. 2007. A multi-theoretic perspective on trust and power in strategic supply chains. Journal of Operations Management. 25. 482-497.. 2007

Ketchen, David J.; Hult, G. Tomas M. 2007. Bridging organization theory and supply chain management: The case of best value supply chains. Journal of Operations Management. 25(2). 573-580

Perez-Aleman, Paola; Sandilands, Marion. 2008. Building Value at the Top and the Bottom of the Global Supply Chain: MNC-NGO PARTNERSHIPS. California Management Review. 51(1). 24-49

Stabell, C. and Fjeldstad, Ø. D. 1998. Configuring value for competitive advantage: on chains, shops and networks. Strategic Management Journal. 19(5)

Wu, Zhaohui; Pagel. 2011. Balancing priorities: Decision-making in sustainable supply chain management. Journal of Operations Management, 29(6).

##### **Other:**

Cases and handouts for reference to be distributed before the course starts.

#### **Recommended reading**

##### **Course outline**

##### **PART 1: Operations Management**

###### **Theme 1: Capacity and bottlenecks**

- Analyzing capacity and bottlenecks
- Quality issues

###### **Theme 2: Managing demand uncertainty**

- The tradeoff between too much and too little
  - Optimal quantity
- Evaluating alternative supply chain configurations

###### **Theme 3: Coordination**

- The bullwhip effect
- Coordination of information and product flow

##### **PART 2: Supply Chain Management**

###### **Theme 4: Supply Chain Management**

- The supply chain management concept
- Approaches, issues, and the logic behind supply chain management

- Design and management of supply chain processes from a shipper perspective

**Theme 5: Supply Chain Networks and the strategic management of Logistics Service Providers**

- Value configuration analysis
- Coordination and integration in supply chain networks
- Design and management of supply chain processes from a logistics service provider perspective

**Theme 6: Supply chain sustainability and responsibility**

Standards and implementation of supply chain strategies among MNCs  
Strategic trade-offs among the economic, environmental and social elements of supply chain networks

**Theme 7: Trust and power in inter-organizational relationships**

- Perspectives on trust and power
- Building and using trust

**Computer-based tools**

Excel and LudoSim (web-based game)

**Learning process and workload**

1 ECTS credit corresponds to a workload of 26-30 hours.

The course is conducted through a total of 32 hours of lectures and casework.

Attendance to all sessions in the course is compulsory. If you have to miss part(s) of the course you must ask in advance for leave of absence. More than 20% absence in a course will require retaking the entire course. It's the student's own responsibility to obtain any information provided in class that is not included on the course homepage/ It's learning or other course materials

**Examination**

The students will be evaluated by the following elements:

- Class participation, counting 20 %
- Two written assignments, counting 40 % each.

The written assignments need to be handed in three weeks after the end of the module. Students will work in groups on the written assignments.

This is a course with continuous assessment (several exam elements) and one final exam code. Each exam element will be graded using points on a scale (e.g. 0-100). The elements will be weighted together according to the information in the course description in order to calculate the final letter grade for the course.

Specific information regarding student evaluation beyond the information given in the course description will be provided in class. This information may be relevant for requirements for term papers or other hand-ins, and/or where class participation can be one of several elements of the overall evaluation

**Examination code(s)**

GRA 81731 - Continuous assessment; accounts for 100 % to pass the course GRA 8173, 4 ECTS credits

The course is a part of the Executive Master of Business Administration Program and all evaluations must be passed in order to obtain a certificate.

**Examination support materials**

**Re-sit examination**

Re-takes are only possible at the next time a course will be held. When course evaluation consists of class participation or continuous assessment, the whole course must be re-evaluated when a student wants to retake a exam. Retake examinations entail an extra examination fee.

**Additional information**

