APPLIES TO ACADEMIC YEAR 2014/2015

MAD 1214 Logistics

Programme
Bachelor of Science in Business (2. year)

Responsible for the course
Eirill Bø

Department
Department of Strategy and Logistics

Term
According to study plan

ECTS Credits
7,5

Language of instruction
Norwegian

Introduction

Logistics studies the physical and administrative processes that surround the acquisition, handling, storage and transportation of products and materials and discusses how these services are made available to the end customer.

Logistical processes often take place across the traditional internal business infrastructures and they affect both the customer and the deliverer. The way that these processes are carried out has a strong impact on both competition and profitability. As a subject, logistics is currently going through a process of development where the main focus of attention was on cost savings in parts of the value chain. Now a more holistic approach is taking place whereby savings can be made as a result of internal integration within a company as well as by cooperation between the deliverer and customer.

Logistics involves maintaining a broad overview over how an industry chain functions, whilst also maintaining an understanding of how the costs incurred by each component in the chain can lead to different consequences. For example, a strong focus on the costs incurred by storage can contribute to a rise in transportation costs and vice versa.

NB!
This course overlaps with course ELE 3715 Logistics and Marketing Channels (7.5 study points) and with course MRK 3520 Marketing Channels and Logistics (7.5 study points). It is therefore not possible to combine this course with any of these above mentioned courses towards a bachelor degree .

Learning outcome

Acquired Kowledge

After completion of the course students will have a basic insight into what logistics means and how it has developed. Students will be able to:

- Understand logistics and supply chain management
- Recognize models such as Du Pont's total cost analysis, ABC analyses and other classification models.
- Examples of concepts that students will be able to identify:
  - Delivery service
  - Logistic costs
  - Delivery relations
  - Strategic alliances
  - Optimizing costs
- Recognize models that optimize the movement of goods

Acquired Skills

Upon course completion students should be able to explain how, with a focus on customer service, one combines economic, social and political perspectives to analyze the physical movement of goods.

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nts will be able to:

- Perform a distribution analysis to find the most effective channels from producer to customer.
- Perform a delivery analysis and know how to make the most effective purchase and how one can foster close relations with individual deliverers.
- Perform a storage analysis and set up a production plan for a specific company.
- Carry out a correct and cost effective delivery service between the components in the supply chain
- Be able to model simple problems in optimalization in connection with transport and storage
- Use Excel Solver to solv optimalization models

Reflection

At the end of the course students will be fully aware of how the utilization of effective distribution channels can come into conflict with protecting the environment. They shall also develop an ethical awareness in relationship to the handling of deliveries in connection with procurement

Prerequisites

There are no special requirements for this course

Compulsory reading

Books:

Persson, Göran og Helge Virum, red. 2011. Logistikk og ledelse av forsyningskjeder. 2. utg. Gyldendal akademisk. 463 sider

Other:

Roberta S. Russell, Bernard W. Taylor III. 2009. Operations management : creating value along the supply chain. 6th ed. Hoboken, NJ : John Wiley & Sons. Supplement to chapter 11, chapter 14 and Solving linear programming problems with Excel

Recommended reading

Course outline

1. Introduction to what logistics is about – what it encompasses and it's development
2. Delivery service and it's significance to the customer
3. How do we quantify delivery service?
4. Prognoses and storage management
5. Production management
6. Puchase and delivery cooperation
7. Distribution and transport' place in the company and the significance of this for the value chain.
8. Principles for creating effective logistic processer
9. Logistics as a competitive strategy
10. The meaning of logistics for the environment.
11. The impact of information technology on logistics
12. What do the leading logistics companies do?
13. Optimalization models for transport and storage

Computer-based tools

Excel spreadsheets will be used in this course

Learning process and workload

This course consists of lectures and exercises which amount to a total of 45 hours

In this course students must work with a optimization case. The case will be published on It's Learning. It shall not be delivered for the purpose of a grade but rather for the written exam where certain questions will be connected to relevant aspects of the case.

Recommended workload in hours

Activity	Hours
Participation at lectures	45
Preparation for lectures	45
Work with excel case	60
Preparation for exams	50
Examination	4
Total recommended use of time	**200**

Use of hours

5 hours of teaching

Examination
The course finishes with a 4 hours individual written exam.

Examination code(s)
MAD 12141 – written examination counts for 100% of the final grade i the course MAD 1214 Logistics. 7.5 credits

Examination support materials
BI authorized examination calculators are allowed.TEXAS INSTRUMENTS BA II Plus
Examination support materials at written examiniations are explained under examination information in the student portal @BI. Please note use of calculator and dictionary. https://at.bi.no/EN/Pages/Exa_Hjelpemidler-til-eksamen.aspx

Re-sit examination
Re-sit examinations are held each semester

Additional information