



Course syllabus

Logistik Logistics

MTTF01, 5 credits, G2 (First Cycle)

Valid for: 2023/24

Faculty: Faculty of Engineering, LTH

Decided by: PLED I

Date of Decision: 2023-04-14

General Information

Main field: Technology.

Compulsory for: I2, M2

Elective for: E4, MD4, Pi4

Language of instruction: The course will be given in Swedish

Aim

The course provides basic knowledge about the logistics system within a company, i.e. approaches and principles used to plan, organize, coordinate, develop, control and manage the flow of material from supplier through the company to its customers. In addition, the course provides an overview of the flow of information that is related to the physical flows, and gives the student awareness of how logistics can affect results and profitability within an organization. Furthermore, the course gives the student fundamental skills in analyzing, designing and selecting logistic solutions for the manufacturing company.

Learning outcomes

Knowledge and understanding

For a passing grade the student must

- have acquired a comprehensive view of logistics and the logistics system
- have acquired knowledge about the role logistics play in the company with an emphasis on both structure and on-going business
- independently provide details about logistics terminology
- independently use common logistics methods and models

Competences and skills

For a passing grade the student must

- have the ability to identify, describe and analyse the materials and information flow within the company
- have the basic skills to analyse and assess how logistics changes affect the company's profitability
- have gained self-confidence and sufficient knowledge to master the basics of logistics
- have gained a general view in order to choose more extensive logistics courses
- be cognizant of the possibilities of logistics
- be able to use engineering methods to analyse a logistics system
- be able to pass both an oral and a written examination and have the ability to discuss one's own as well as other students' analyses

Judgement and approach

For a passing grade the student must

be able to apply critical and creative thinking and, hopefully, acquire a lasting interest in logistics. The student should have obtained a professional attitude towards a firm's logistical challenges and opportunities.

Contents

The course consists of four parts: strategy, structure, planning and control, and development. The first part defines a supply chain, basic concepts, goals and strategies for supply chains. Part two is concerned with the structure of purchasing and supply networks, production, and distribution networks to costumers. Part three covers forecasting, long term and short term planning and control of inventory and capacity, and purchasing planning. The concluding fourth part is concerned with development, trends and challenges for supply chains, including sustainable supply chains.

Examination details

Grading scale: TH - (U,3,4,5) - (Fail, Three, Four, Five)

Assessment: Written examination. Written assignments or other assignments may occur. Compulsory attendance may occur in certain parts.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Parts

Code: 0117. **Name:** Written Examination.

Credits: 4. **Grading scale:** TH. **Assessment:** Satisfactory exam.

Code: 0217. **Name:** Assignments.

Credits: 1. **Grading scale:** UG. **Assessment:** Satisfactory assignments.

Admission

Assumed prior knowledge: MIO012/MIOA01 Managerial Economics, BC or equivalent.

The number of participants is limited to: No

The course overlaps following course/s: MTT105, MTT202, MTTN01

Reading list

- Jan Olhager: Supply Chain Management , Produktion och logistik i försörjningskedjor. Studentlitteratur, 2019.

Contact and other information

Course coordinator: Universitetsadjunkt Eva Berg, eva.berg@tlog.lth.se

Course homepage: <http://www.tlog.lth.se>