



## Course syllabus

School of Business and Economics

Department of Management

2FE035 Fördjupningskurs I i logistik, 30 högskolepoäng

2FE035 Specified course I in Business Logistics, 30 credits

### **Main field of study**

Business Administration

### **Subject Group**

Business Administration

### **Level of classification**

First Level

### **Progression**

G2F

### **Date of Ratification**

Approved 2009-12-16

Revised 2022-12-05 by School of Business and Economics. Change of department

The course syllabus is valid from spring semester 2023

### **Prerequisites**

Business Administration 1-60 higher education credits or the corresponding.

## Objectives

### **Module 1. Distribution Management, 6 credits**

After completing this course the student should be able to:

- thoroughly account for distribution structures and delivery service
- account for and classify the actors in the transportation industry
- explain IT as an enabler in the distribution channel
- account for and analyze environmental aspects related to the logistics system
- apply transportation and logistics law with a focus on Incoterms
- apply safety stock dimensioning and advanced inventory management
- identify and critically discuss problems and situations within a theory area associated with distribution

### **Module 2. Production Management, 6 credits**

After completed course the student should be able to:

- explain the role of production management in the logistics system and in society
- account for different generic production layouts and select an appropriate layout in a given production logistics situation
- search and select appropriate data and apply the appropriate forecasting method for this data
- conduct broad inventory management calculations and customer service calculations together with interpreting and assessing the findings
- account for carriers, packaging, information systems and their role in a sustainable logistics system

### **Module 3. Logistics Quality and Process Management, 6 credits**

After completed course the student should be able to:

- account for basic concepts in quality and quality management
- apply quality tools and models for customer satisfaction in a logistics perspective
- understand the impact of process orientation and process management for the development of logistics systems
- conduct process mapping and quality measuring in a limited area, identify and analyze quality deficiencies and critically discuss improvement suggestions

### **Module 4. Strategic Purchasing and Negotiations, 6 credits**

After completed course the student should be able to:

- show advanced knowledge of purchasing and materials supply
- account for supplier evaluation and supplier development
- apply multiple criteria differentiation of a product assortment
- apply business negotiations with ethical behavior, CSR and codes of conduct

### **Module 5. Project within Business Logistics, 6 credits**

After completed course the student should be able to:

- formulate and critically discuss questions for a limited reality-based logistics problem
- plan and conduct a logistics project in a real company/a real organisation
- search and select applicable theory and apply logistics knowledge on a real problem
- critically discuss empirical data in relation to the selected theory
- report in written form and present and discuss findings in different contexts (in seminars and at the company)

## **Content**

### ***Module 1 Distribution Management 6 credits***

- distribution structure; definitions, inventory structures, physical flows, determination points, ordering systems and delivery service
- the transportation industry; supply, production, development, infrastructure issues and IT solutions
- basic transportation and logistics law, the use of Incoterms
- environmental aspects of the logistics system
- description of marketing channels and their actors. The division of roles between

- the actors in the channel. Organisation, integration and forms of collaboration, conflict resolution strategies and leadership within the marketing channel
- quantitative models. The moment contains quantitative models for flow analyses in the distribution channel
- safety stock dimensioning of distribution stocks including basic probability and some important probability distributions and DRP (Distribution Requirement Planning)
- the writing of the introduction chapter of a theoretical paper

### ***Module 2 Production Management 6 credits***

- material planning and control; techniques and methods for planning and control of material flows in different planning horizons and production environments. Methods with particular focus are master production scheduling, order planning, capacity planning and operation planning
- forecasting methods; qualitative and quantitative
- methods for lot sizing with limited capacity, variable demand, periodic/continuous inspection
- manufacturing process types and the related basic layout types
- production processes; lean production
- carriers and information systems, packaging, identifications systems and handling

### ***Module 3 Logistics Quality and Process Management 6 credits***

- quality management. Central concepts, history and importance. Approaches to continuous improvement. Quality measurements and quality tools
- process management. Central concepts, process mapping. Process design, control and improvement. Process management measurements
- customer satisfaction. Importance, measurement methods
- quality approaches. ISO9000:2000, Utmärkelsen Svensk Kvalitet, QS9000/TS16949
- logistics quality. Measuring logistics performance, the SCOR model

### ***Module 4 Strategic Purchasing and Negotiation 6 credits***

- the roles and objectives of purchasing, its strategical importance and organisational position
- purchasing strategies and principles, purchasing tools
- the purchasing process
- supplier evaluation and supplier development, network thinking
- product and supplier differentiation
- computer labs
- negotiations including ethical behavior, CSR and codes of conduct

### ***Module 5 Project within Business Logistics 6 credits***

- the student should assign 1-2 days a week during one semester for the course
- project work out of a perceived company- identified problem
- problem discussion, limitation and practical planning
- literature search and review
- data collection and analysis
- written presentation and in seminars
- report writing
- reporting in the company and at a final seminar

## Type of Instruction

### **Module 1. Distribution Management, 6 credits**

Teaching consists of lectures, exercises and tutorial meetings. Participation in seminars and guest lectures is compulsory. Compulsory elements will be shown in the class schedule

### **Module 2. Production Management, 6 credits**

Teaching consists mainly of lectures and exercises. Cases, guest lectures and field visits could also be part of the course. Participation in case-seminars, field visits and guest lectures are compulsory. Compulsory elements will be shown in the class schedule

### **Module 3. Logistics Quality and Process Management, 6 credits**

Teaching consists of lectures, group assignment tutorial meetings and seminars. Participation in seminars and guest lectures is compulsory. Compulsory elements will be shown in the class schedule

### **Module 4. Purchasing Management and Negotiation, 6 credits**

Teaching consists of lectures, guest lectures, computer labs and negotiation exercises. Participation in guest lectures and negotiation exercises are compulsory. Compulsory elements will be shown in the class schedule

### **Module 5. Project within Business Logistics, 6 credits**

Problem based learning with tutoring and seminars. Compulsory elements will be shown in the class schedule

## Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Results are graded using one of the terms Passed with distinction, Pass or Fail, and A-F according to the ECTS scale.

For the grade pass, the objectives have to be reached; the grade is based upon the degree to which the objectives are met. The weighing of the grades to the course grade is following the principles in the document "Principer för betygsrapportering dnr ELNU 2011/160".

Students who do not achieve a satisfactory result in the examinations are permitted to make a second attempt approximately 5-8 weeks after the normal examination date. The student will have a minimum of five occasions for written exams in relation to the syllabus to which the student was accepted. Usually 3 occasions per academic year.

### **Module 1. Distribution Systems, 6 credits**

The course is examined by two individual written exams, where one is theoretical and one is quantitative. The students also write a theoretical paper.

### **Module 2. Production Management, 6 credits**

The course is examined by an individual written exam and a groupwise lean production game.

### **Module 3. Logistics Quality and Process Management, 6 credits**

The course is examined by an individual written exam and a group paper.

### **Module 4. Strategic Purchasing and Negotiation, 6 credits**

The course is examined by an individual written exam, computer laborations and a negotiation workshop.

### **Module 5. Project within Business Logistics, 6 credits**

The projects are graded by continuous follow-ups and seminars. Participation is compulsory.

## **Course Evaluation**

A written course evaluation is carried out and compiled in a report, which is archived at the faculty. The results and possible measures taken are communicated by the course coordinator and presented to the students the next time the course is given, or in another way deemed suitable by the course coordinator. Other types of course evaluations, for example regular evaluations throughout the course or discussions with students, will be included and encouraged with the aim of ensuring continuous quality development.

## **Required Reading and Additional Study Material**

### **Mandatory literature**

#### **Module 1. Distribution Management, 6 credits**

Björklund, M. *Hållbara logistiksystem*. Studentlitteratur. Latest edition. 150 pages.

Nahmias, S. *Production and Operations Analysis*. McGraw-Hill. Latest edition. 500 pages.

Scientific articles. 200 pages.

#### **Module 2. Production Management, 6 credits**

Nahmias, S. *Production and Operations Analysis*. McGraw-Hill. Latest edition. 500 pages.

#### **Module 3. Logistics Quality and Process Management, 6 credits**

Bergman, B. & Klefsjö, B. *Kvalitet från behov till användning*. Studentlitteratur. Latest edition. 640 pages.

Ljungberg, A. & Larsson, E. *Processbaserad verksamhetsutveckling*. Studentlitteratur. Latest edition. 350 pages.

**Module 4. Purchasing Management and Negotiation, 6 credits**

Van Weele, A. *Purchasing and Supply Chain Management – analysis, planning and practice*. International Thompson Business Press. Latest edition. 363 pages.

**Module 5. Project within Business Logistics, 6 credits**

No mandatory literature. The student select literature based on each project and together with the tutor.