

Syllabus
BAE2511 Logistics
Prof. Dr. -Ing. Matthias Weyer
Winter Semester 2024/25

Level	Bachelor	
Credits	3	
Student Contact Hours	2	
Workload	90 Hours	
Prerequisites	None	
Time	s. LSF	
Room	s. LSF	
Start Date	s. LSF	
Lecturer(s)	Name	Prof. Dr.-Ing. Matthias Weyer
	Office	T1.4.25
	Virtual Office	Virtual Office Prof. Weyer
	Office Hours	Monday, 15:15 – 16:15 (Nach Terminvereinbarung)
	Phone	(07231) 28-6504
	Email	matthias.weyer@hs-pforzheim.de

Summary

In this course the principles of logistics and special knowledge about production logistics will be imparted. It is the aim that the students learn the general goals, functions and tasks of logistics and their meaning for an increase in a company's value. For that it is essential that the students gain a logistical mindset and occupy themselves with management rules and design structures in terms of logistics planning and implementation.

The students will learn the theoretical basics, broaden them in discussions and learn to apply them by means of practical expert knowledge.

In this way the lectures impart the importance of logistics and logistical mindset but also specific topics (e. g. collection, distribution and provision of goods to their place of consumption). Based on the occurring questions in the course, it is aimed to encourage a discussion and thereby a critical debate on the topic..

Outline of the Course

- The importance of logistics for an increase in a company's value
- The Logistics Dilemma
- The Flow-System-Paradigm
- Design and management principles of logistics
- Definition and differentiation of production logistics
- Inbound logistics
- Warehouse logistics
- Production material control
- Outbound logistics

Course Intended Learning Outcomes and their Contribution to Program Intended Learning Outcomes / Program Goals

Program Intended Learning Outcomes	Course Intended Learning Outcomes
After completion of the program the students will be able...	After completion of the course the students will be able...
1 Expert Knowledge	
1.3 ...to demonstrate their distinguished and sound competencies in General Business Administration.	Introduction to and communication of logistics basics (as principles of logistics management and design) and also discussions based on expert knowledge, especially of production logistics.
2 Digital Skills	
3 Critical Thinking and Analytical Competence	
3.1 ...to implement adequate methods in a competent manner and to apply them to complex problems.	The focus is the transformation of limited thinking and dealing confined to logistics to a new management paradigm, the "flow system paradigm".
4 Ethical Awareness	
5 Communication and Collaboration Skills	
6 Internationalization	
7 Interdisciplinary operations	
7.1 Students demonstrate key knowledge and methodological know-how in international management and engineering.	Design of global logistics networks, control and design of materials- and information flows within the network
7.2 Students demonstrate their ability of analytical and critical reflection and their capacity to work out viable solutions for challenges in international management and engineering.	Design of global logistics networks, control and design of materials- and information flows within the network
7.3 Students show that they are able to apply their international management and engineering competencies in specific situations.	Design of global logistics networks, control and design of materials- and information flows within the network

Teaching and Learning Approach

The teaching and learning concept is divided into **five modules**.

Module I require the students to work through chosen passages of given lecture notes and have the opportunity to broaden their knowledge by reading recommended literature. With this previously-gained knowledge the students attend the lecture.

In **Module II** the knowledge from Phase I will be illustrated and rounded off in lectures and also broadened with background knowledge by means of sample calculations, tasks, application examples and question and answers.

Within **Module III** the students have the possibility to experience live the topics discussed. Hereto there will be an excursion to a company where the logistics processes are more tangible for the students.

Core of **Module IV** is a guest lecture from a logistics expert from industry that will take place at a later time in the semester. Students have the opportunity to get information first hand and to discuss and broaden their theoretical knowledge.

In **Module V** the handling of leading standard software will be consolidated based on a logistical use case. In a full-day SAP course logistical processes should be projected and performed in the system.

The continuous reflection of the learned topics and the review of the given mindset and imparted knowledge from the modules I-V is also indispensable as the continuous working on the exercises and collaboration for the successful learning process. At the same time with that approach the exam preparation effort is minimized and spread over the semester. Therefore, an active collaboration in the lessons is a crucial part of the teaching and learning concept.

The lecturer is always available within all modules of the course as a dialogue partner to give support and suggestions. Furthermore, the communication takes place in personal conversations or via e-mail.

Literature and Course Materials

- **Corsten, D.; Gabriel, C.:** Supply Chain Management erfolgreich umsetzen, Berlin, 2004
- **Hahn, D.; Kaufmann, L. (Hrsg.)** "Handbuchindustrielles Beschaffungsmanagement"; Wiesbaden, 2002.
- **Göpfert, I.** „Logistik Führungskonzeption: Gegenstand, Aufgaben und Instrumente des Logistikmanagements und –controllings“, 2. überarb. Auflage, München , 2005.
- **Heinrich, M.** „Transport- und Lagerlogistik“,7. Auflage, Wiesbaden, 2009
- **Heiserich, O.- E.** "Logistik– Eine praxisorientierte Einführung"; Wiesbaden, 2002
- **Kummer, S.** at all. "Grundzüge der Beschaffung, Produktion und Logistik"; Pearson Education Deutschland GmbH, München, 2010.
- **Pfohl, H.-C.** Logistiksysteme. Betriebswirtschaftliche Grundlagen. 7., korrigierte und aktualisierte Auflage, Berlin, 2004.
- **Pfohl, H.-C.** „Logistikmanagement“, 2. Aufl., Berlin, 2004.
- **Schulte, C.** „Logistik“, 4. Aufl., München, 2005
- **Specht, G.** „Distributionsmanagement“, 4. überarb. und erw. Aufl., Stuttgart, 2005.
- **Lecture slides**

Assessment

60 mins examination (PLK)

Grading scale:

- 1 = excellent (pass grade) = outstanding work;
- 2 = good (pass grade) = work which is far above average
- 3 = satisfactory (pass grade) = average work;
- 4 = sufficient (pass grade) = work with shortcomings which still meets requirements
- 5 = insufficient (fail grade) = work with severe shortcomings, does not meet requirements

Schedule

The time available will roughly be spend on:

- 20% scope and importance
- 10% services and costs
- 10% management & design principles
- 20% contractual material purchase
- 40% production logistics

Code of Conduct for Students

- Read the syllabus
- Practice fair play to your fellow students
- Print and read the abstracts/notes before the lecture/exercise and take a look at it
- Please make sure to be on time and avoid to leave the lectures/exercises early
- Contribute to a pleasant atmosphere (i.e. silence)
- Solve your exercises independently
- Raise questions if you don't understand something

[Link to the Code of Conduct for online Teaching](#)

Teaching Philosophy

My aim is to establish a fundamental comprehension for the common topics in logistics, especially production logistics. That should enable you to have an overview referring to planning activities that are across functions and process borders in order to pursue the overall optimum instead of a suboptimal individual optimum.

Therefore, I want to encourage you to take a holistic view, which may be a competitive advantage towards business partners and competitors.

Moreover, you should gain knowledge about important logistical models, instruments, methods and processes so you feel confident in a logistics environment and may convince with expert knowledge. I'm trying to achieve that with different modules:

1. At first, I will try to impart a mindset that will help you to analyse practical logistic problems successfully. Thereby I will present logistic and generally applicable principles of management and configuration which will help you to solve the tasks.
2. On this basis, specific methods, instruments and processes will be communicated with the focus on production logistics.
3. To consolidate the theoretical knowledge, there will be an excursion to a production facility where you can see learned and still to be learned topics in reality (likely not in summer 2011).
4. Moreover, you will get the opportunity to get deeper insights into logistic planning activities by attending a guest lecture from a practitioner.

Comprehension questions and comments with a contribution to the learning effect to all students are always welcome and should be raised immediately. The purpose is that you complete the course successfully. Nevertheless, you have to do the essential part of the work and hence your success is down to your own personal responsibility.

Additional Information

Learning objectives and outcomes:

- The students know the objectives, functions and tasks of logistics.
 - The students know the meaning of logistics for an increase in a company's value.
 - The students deal with the specific mindset and problems of logistics.
 - The students recognize the advantages of holistic optimization as opposed to individual optimization.
 - The students know the essential and specific instruments, methods and processes in production logistics.
 - The students orientate themselves in a logistics context (especially production logistics) and has a broad knowledge to reflect and develop plans within logistics (such as implementation of material provision, planning of material requisitions, definition of parts supply processes)
- ⇒ The student is able to deal with supply chain management planning problems and tasks and is able to create value in a company context with the expert knowledge and mindset acquired.

Language: English