Course:
BAE2122–Logistics 2

2 SWS, 2 Credits, Language: English; advanced level

- Lecture

  Monday, 01:45 – 03:15 p.m.
  Room: tba

Time schedule: see LSF and E-Learning-Course “BAE2122 - Logistics 2”

Tutor:
Prof. Dr.-Ing. Matthias Weyer
(Further details: https://www.hs-pforzheim.de/index.php?id=1632&tx_wracadem_academ%5Bacademid%5D=437&tx_wracadem_academ%5Baction%5D=detail&tx_wracadem_academ%5Bcontroller%5D=List)
Office: T1.2.27, colloquium: Tuesdays, 09:45 – 11:15 a.m.
E-Mail: matthias.weyer@hs-pforzheim.de (preferred mode of communication)

My aim is to ensure that you succeed in your training. Therefore I want to provide support. In the case of occurring problems or questions, feel free to contact me, for instance by e-mail. I will answer promptly and if required schedule an appointment.

Brief course description:

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.
The knowledge procured in lectures will be consolidated and enhanced by a facility visit and a one day SAP basics course.

Requirements:

Learning outcome:

The student

- knows the objectives, functions and tasks of logistics,
- knows the meaning of logistics for an increase in a company's value,
- deals with the specific mindset and problems of logistics,
- recognizes the advantages of holistic optimization as opposed to individual optimization,
- knows the essential and specific instruments, methods and processes in production logistics.
- orientates himself 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.

Content (extract):

- 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 contributions to degree program target

	Learning result	Contribution
1.1	Students demonstrate key knowledge in Technical Basics.	Introduction to and communication of interdependencies between technical and business requirements
1.2	Students demonstrate key knowledge in Mechanical Engineering.	
1.3	Students demonstrate key knowledge in 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.
1.4	Students demonstrate key knowledge in Economics.	
1.5	Students demonstrate key knowledge in Mathematics.	
1.6	Students demonstrate key knowledge in Quantitative Methods.	
1.7	Students demonstrate key knowledge in Computer Science.	
2.1	Students demonstrate proficiency in using current computer programs to solve business and technical problems.	
2.2	Students demonstrate the ability to use information systems effectively in real world business settings.	Autonomous generation and simulation of the logistics process through SAP (ERP system). (Introduction/conveyance of knowledge)
3.1	Students are able to apply analytical and critical thinking skills 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”.
4.1	Students are able to develop business ethics-based strategies and are able to apply them to typical business decision-making problems.	
5.1	Students demonstrate their ability to express complex issues in writing.	
5.2	Students demonstrate their oral communication skills in presentations and lectures.	
6.1	Students show that they are able to work successfully in a team by performing practical tasks.	
7.1	Students demonstrate their ability to develop and present complex interdisciplinary solutions by means of an application oriented assignment.(GM)	With the obtained knowledge about the different trade-offs in logistics the students get a deeper insight into contrary aims from different departments and will learn a concept on how to handle these conflicting goals.
7.1	For specific cases students demonstrate their ability to understand and design cross-functional as well as cross-company business processes in a global context. (GPM)	The aim is a holistic design and optimization of material and information flows across the functional borders of the company and the borders of the supply chain (supplier – company – customer).
7.1	Students show that they are able to apply their cross-cultural skills in specific situations.(IM)	

Teaching and learning concept

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

Module I requires 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.

Performance record regulations:

The performance level will be verified in an exam at the end of the semester where the essential topics of the lectures will be tested.

Grading:

Exam at the end of the semester (30 minutes; usually a combined test with logistics 1 (in total 60 min.) but also possible as a single test for our international exchange students)

- 'Very good' (A grade) signifies that the performance is above and beyond expectations.
- 'Good' (B grade) means that the performance is good and above average.
- 'Satisfactory' (C grade) means that it is an average performance containing insufficiencies but principally appropriate to the expectations.
- 'Adequate' (D grade) describes a below-average performance with obvious deficiencies.
- 'Inadequate' (E grade) is an unacceptable performance that is not sufficient to any expectations.

Course literature:

- **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.
- **Uhr, W., Lasch, R.** „Logistik" Schäffer-Poeschel, 2003.
- **Schulte, C. „**Logistik", 4. Aufl., München, 2005
- **Specht, G. „**Distributionsmanagement", 4. überarb. und erw. Aufl., Stuttgart, 2005.
- **Zeitschriften**: Logistikheute, Logistik Management, Journal of Business Logistics

- „Abstract Notes" under www.prof-weyer.de(„Username" and „Passwort" will be announced in course)

My self-perception as lecturer

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.
5. An SAP course is aimed to enhance your handling of logistical processes with standard software.

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.

Code of behaviour:

- 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 them
- be on time and don't leave the lectures/exercises early
- contribute to a pleasant atmosphere (i.e. silence)
- solve your exercises independently
- raise a question if you don't understand something
- build up your knowledge continuously

Temporary time schedule

No.	Date	Content	Notes
	03.10.2016	No lecture	
1	10.10.2016	Scope and Importance 1	
2	17.10.2016	Scope and Importance 2	
3	24.10.2016	Services and Costs	
4	31.10.2016	Management & Design Principles 1	
5	07.11.2016	Management & Design Principles 2	
6	14.11.2016	Production Logistics 1	
7	21.11.2016	Production Logistics 2	
8	28.11.2016	Production Logistics 3	
9	05.12.2016	Production Logistics 4	
10	12.12.2016	Production Logistics 5	
	19.12.2016	Buffer	
	26.12.2016	No lecture	
	02.01.2017	No lecture	
	09.01.2017	Buffer	
	16.01.2017	Buffer	
	23.01.2017	Buffer	
11, 12, 13	09.12.2016 16.12.2016	SAP-Workshop: 08:00 a.m. - 04:00 p.m.	More information: see Logistik 1
14,15	25.11.2016	Factory Tour "Mercedes-Benz Werk"	9:00 a.m. Rastatt

Rules for proper academic work

The lecturer appreciates a substantial exchange between the students, because the fellow students may have valuable contributions to the comprehension of occurring problems or questions.

Following the arguments, collaboration and also an autonomous exercise solving or the discussions on upcoming questions within the lectures are fundamental for a clearer understanding of the subject matter.

Especially large class sizes and foreign languages imply a risk of a high noise level, which has a strong negative influence on the work climate, knowledge acquisition and collaboration. Predominantly a high noise level is caused by a few group members. These ‘troublemakers’ hinder the other ones from being able to concentrate and therefore won’t be tolerated and will be ejected from the class.