

**BIS 2041**  
**Business Process Management and**  
**Transactional Process Systems (BPMT)**

**Syllabus, Winter 2019/2020**

<b>Weekly hours</b>	4 hours																		
<b>ECTS-Credits</b>	<b>4</b>																		
<b>Workload</b>	<p>Students have to prepare before classes according to the timetable. During class the students gain a deeper understanding by explanations, examples and the application of methods and tools. In addition, the students work continuously during the semester on exercises and on case studies in teams of three to four persons. The following workload estimate can be derived:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">Preparation</td> <td style="width: 20%; text-align: right;">(15*1=)</td> <td style="width: 30%; text-align: right;">15 hours</td> </tr> <tr> <td>Contact hours</td> <td style="text-align: right;">(15*4=)</td> <td style="text-align: right;">60 hours</td> </tr> <tr> <td>Exercises</td> <td style="text-align: right;">(15*1=)</td> <td style="text-align: right;">15 hours</td> </tr> <tr> <td>Case studies</td> <td style="text-align: right;">(15*1=)</td> <td style="text-align: right;">15 hours</td> </tr> <tr> <td>Exam preparation</td> <td></td> <td style="text-align: right;">15 hours</td> </tr> <tr> <td>Total</td> <td></td> <td style="text-align: right;">120 hours</td> </tr> </table>	Preparation	(15*1=)	15 hours	Contact hours	(15*4=)	60 hours	Exercises	(15*1=)	15 hours	Case studies	(15*1=)	15 hours	Exam preparation		15 hours	Total		120 hours
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Case studies	(15*1=)	15 hours																	
Exam preparation		15 hours																	
Total		120 hours																	
<b>Begin</b>																			
<b>Language</b>	English																		
<b>Prerequisites</b>	Proof of English language skills																		
<b>Lecturer</b>	Prof. Dr. Joachim Schuler Office: W2.2.04 Email: joachim.schuler@hs-pforzheim.de Office hours/colloquium: see <a href="#">LSF</a>																		

## Course Description

The course imparts

- an overall outline about the business process management topic
- fundamental concepts for business process design as well as current trends in this area
- methodic approaches for modeling, analysis, and optimization of business processes
- in detail: foundations in business process management, business modeling using BPMN, principles of business process management and business process excellence life cycle, process analysis and process optimization as well as business process management within an enterprise
- business processes as a starting point for the design of IT systems (process modelling, modelling of organizational units, modelling of information objects)
- the role of enterprise applications (ERP, CRM, SRM, SCM, and PLM) in a business context and corresponding opportunities for process optimization using IT systems
- a general overview of Enterprise Systems (ES) using SAP ERP software
- foundations of SAP ERP like organizational units and master data within the area of logistics
- a real case study cementing the theoretical foundation of the system and business processes by putting theory into practice using integrated business processes

## Learning Goals

Students

- conceive fundamental concepts for business process management design and current trend within this area
- understand business processes as a starting point for the design of IT systems
- discern interdependencies and interaction of core business processes from the area of logistics like procurement, inventory management, etc.
- conceive the transformation of business process requirements in IT solutions and the relevance of integration aspects within ERP systems using SAP ERP
- understand fundamental approaches and concepts of business process optimization using transaction systems
- discern the importance of standard software using SAP ERP as well as the architecture and integration of operative IT systems (like ERP, CRM, SRM, SCM, and PLM) from a business perspective
- know how to employ SAP ERP in the area of logistics from a user's perspective
- will be able to identify and match real-life business processes into ES business processes and navigate through SAP ERP processes like the Procure-to-Pay and Sales-to-Cash business processes.

**Contribution to program goals**

2.1	Use of IT in laboratory	Use BPM Modeling Tools and SAP ERP
3.1	Critical thinking and analytical competence	Identify weaknesses in a given process design and suggest improvements that will benefit organizational performance
5.2	Oral communication	Presentation of project results
6.1	Team work	Conducting team work in project
7.1	Expert knowledge	model processes in BPMN for subsequent implementation in Business Process Management Systems Processes in Procurement and Sales and the support with SAP ERP
7.2	Application of methods	BPMN for Modeling
7.3	Critical reflection/ alternative solutions	about KPIs and how to optimize Procurement and Sales processes

**Teaching approach**

This course follows a holistic approach to teaching and learning. During the lectures, the content will be presented supported by in class discussions.

Additionally, a case study is used to deepen the students' understanding for SAP ERP. The case study will need to be work on the project in teams. The project is to develop and present an integration process live on SAP ERP.

**Course assessment**

1	Class participation	20%
2	Presentation of Group work	40%
3	Written exam	40%

The assessment will be made on

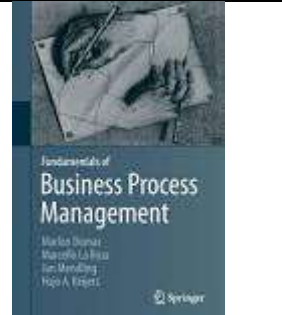
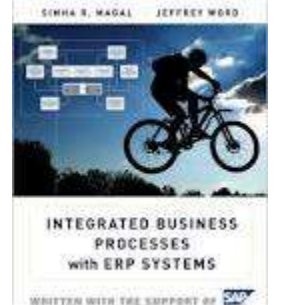
ad 1) contribution to discussions, Contribution to FAQ, Attendance

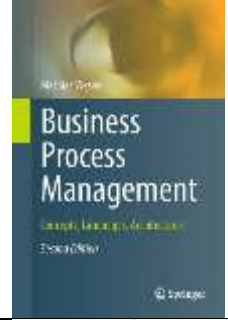

ad 2) the project results and the presentation. The presentation has to be submitted (as advised) before the due time. Team work is to be shared equally among members of the group.

**Timetable (tentative)**

BPM DEM					Remarks
02.10.19	Wed	8.00 - 9:45	W3.2.03	Kick-Off, Intro	SAP Accounts, Definition Groups
04.10.19	Fri	12:00 - 13:30	W2.2.02	Start MM Case	
09.10.19	Wed	8.00 - 9:45	W3.2.03	Intro SD	
11.10.19	Fri	12:00 - 13:30	W2.2.02	Start SD Case	MM Case done --> upload MMControl Sheet
16.10.19	Wed	8.00 - 9:45	W3.2.03	Lecture Processes, ERP	
18.10.19	Fri	12:00 - 13:30	W2.2.02	Start own masterdata	SD Case done --> upload SD Control Sheet
23.10.19	Wed	8.00 - 9:45	W3.2.03	Lecture Processes, ERP	
25.10.19	Fri	12:00 - 13:30	W3.2.04	Solving problems, Start Groupwork SAP	having stock and sold your material
30.10.19					
01.11.19					
06.11.19					
07.11.19	Thur	13:30 - 18.00	W1.2.03	Aseco Workshop	compulsory attendance
08.11.19	Fri	12:00 - 13:30	W2.2.03	Coaching 1	11:30 G1 12:00 G2, 12:30 G3; 13:00 G4
13.11.19	Wed	8.00 - 9:45	W3.2.03		
15.11.19	Fri	12:00 - 13:30	W3.2.04	Lecture BPM	
20.11.19	Wed	8.00 - 9:45	W3.2.03	Lecture BPM	
22.11.19	Fri	12:00 - 13:30	W3.2.04	Coaching 2	11:30 G4 12:00 G3, 12:30 G2; 13:00 G1
27.11.19	Wed	8.00 - 9:45	W3.2.03	Lecture BPM	
29.11.19	Fri	12:00	W3.2.04	BPMN Workshop 12:00 - ca. 18.00	compulsory attendance
04.12.19					
06.12.19	Fri	12:00 - 13:30	W3.2.04	Coaching 3	11:30 G2 12:00 G1, 12:30 G4; 13:00 G3
11.12.19	Wed	8.00 - 9:45	W3.2.03	Lecture BPM	
13.12.19	Fri	12:00 - 13:30	W3.2.04	Lecture BPM	
18.12.19					
20.12.19	Fri	12:00 - 13:30	W3.2.04	Coaching 4	11:30 G3 12:00 G4, 12:30 G1; 13:00 G4
25.12.19					
27.12.19					
01.01.20					
03.01.20					
08.01.20					
10.01.20	Fri	12:00 - 13:30	W3.2.04	SAP Final Presentation	
15.01.20	Wed	8.00 - 9:45	W3.2.03	Sum Up	
17.01.20	Fri	12:00 - 13:00	W3.2.04	Exam	
22.01.20					
24.01.20	Fri	12:00 - 13:30	W3.2.04	Feedback	

**Literature**

	<p>Dumas, M., La Rosa, M., Mendling, J, Reijers, H. Fundamentals of Business Process Management Springer-Verlag 2013</p>
	<p>Simha R. Magal, Jeffrey Word Integrated Business Processes with ERP Systems John Wiley &amp; Sons Inc, 2010</p>

	<p>Weske, M. Business Process Management: Concepts, Languages, Architectures. (Second Edition). Springer, 2012</p>
	<p>Jeston, J.; Nelis, J. Business Process Management: Practical Guidelines to Successful Implementations Butterworth-Heinemann, 2006</p>

## Ressources

Lecture slides, case material, and any additional resources will be provided through the e-learning platform