

Syllabus  
**BAE4192 Business Process Modeling**  
Matthias Dietel  
Summer Semester 2022

<b>Level</b>	Advanced Level	
<b>Credits</b>	2	
<b>Student Contact Hours</b>	2	
<b>Workload</b>	60 Hours	
<b>Prerequisites</b>	N/A	
<b>Time</b>	s. LSF	
<b>Room</b>	s. LSF	
<b>Start Date</b>	s. LSF	
<b>Lecturer(s)</b>	<b>Name</b>	Matthias Dietel
	<b>Office</b>	N/A
	<b>Virtual Office</b>	s. LSF
	<b>Office Hours</b>	Upon Appointment
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## Summary

Business Process Management is the set of concepts, methods, and tools that help organizations define, implement, measure and improve their end-to-end processes. The course addresses the methods and techniques required to analyse, design, implement, automate, and evaluate business processes. The main goal of the course is an introduction to essential principles of Business Process Management. The most important concept of BPM will be explained including the business rules and human interaction with processes. The course aims to the modelling of processes with graphical notation BPMN. We will explore tools and solutions supporting the modelling. The course includes a term project where students practice their theoretical knowledge. Blended Learning is an essential component of this course.

## Outline of the Course

- Business Processes
- BPMN process models
- Process design

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

	Lernergebnis	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 Business Process Management
1.4	Students demonstrate key knowledge in Economics.	Introduction to Business Process Management and its application within economic environments
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.	Introduction to Business Process Management Tools
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.	
3.	Students are able to apply analytical and critical thinking skills to complex problems.	Students will be able to identify weaknesses in a given process design and suggest improvements that will benefit organizational performance.
4.	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.	Students show that they are able to work successfully in a team by performing practical tasks.	
7.	Students show that they are able to apply their cross-cultural skills in specific situations.	
7.1	Students demonstrate key knowledge and methodological know-how in international management and engineering.	
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.	
7.3	Students show that they are able to apply their international management and engineering competencies in specific situations	

## Teaching and Learning Approach

Business Process Modeling is an interactive lecture how to model business processes. Therefore, we use examples from real life. To participate fully in class, students are expected to attend classes, read the assigned literature / cases and engage in the practical usage.

## Literature and Course Materials

- Jeston, John; Nelis, Johan (2008): Business Process Management: Practical Guidelines to Successful Implementations. 2nd edition, Butterworth-Heinemann.
- Allweyer, T. (2014): Geschäftsprozessmanagement, W3I-Verlag, Witten
- Allweyer, T. (2015): BPMN 2.0, 3. Aktualisierte Auflage, Books on Demand, Norderstedt
- Fischermanns, G. (2013): Praxishandbuch Prozessmanagement, Verlag Dr. Götz Schmidt, 11. Auflage, Gießen
- Gadatsch, A. (2012): Grundkurs Geschäftsprozess-Management, 7. Auflage, Vieweg+Teubner, GWV Fachverlage GmbH, Wiesbaden
- Schmelzer, H., Sesselmann, W. (2008): Geschäftsprozess-Management in der Praxis, 6. Auflage, Carl Hanser Verlag, München

## Assessment

Home assignment during the semester; at the end of the semester is must be finished.

- '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.

## Schedule

<b>Session 1 - 2</b>	Theory - Business Process Management
<b>Session 2 - 3</b>	Theory - Basic Business Process Management and Notation (BPMN) Elements, Advanced BPMN Elements Part 1
<b>Session 4 - 6</b>	Labor (PC) - Exercises Basic BPMN Elements and Advanced BPMN Elements Part 1
<b>Session 6 - 7</b>	Theory - Advanced BPMN Elements Part 2
<b>Session 7 - 9</b>	Theory - Advanced BPMN Elements Part 3 - 4
<b>Session 10 - 12</b>	Labor (PC) - Exercises Advanced BPMN Elements Part 2 - 3
<b>Session 13 - 14</b>	Theory - BPMN Style, Process Optimization, Labor (PC) - Process Optimization

## Academic Integrity and Student Responsibility

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.

## Code of Conduct for Students

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

## Teaching Philosophy

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.

## Additional Information

**Language:** English

**Learning Outcome:**

Students will be able to assess the efficiency and effectiveness of an organization

from a process perspective, conduct process improvement projects, and determine the role of technology in supporting corporate processes.

1. Knowledge: Students will be conversant in the terms used to describe, analyse, and improve Business Processes in organizations.

2. Comprehension: Students will be able to understand BPMN process models.

3. Application: Students will be able to model processes in BPMN for subsequent implementation in Business Process Management Systems.

4. Analysis: Students will be able to identify weaknesses in a given process design and suggest improvements that will benefit organizational performance.

5. Synthesis: Students will be able to redesign a given process using improvement patterns and outside best practices. Syllabus BAE4192 – Business Process Modeling WS 2020/21  
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6. Evaluation: Students will be able to develop an implementation and integration strategy for processes that leverages organizational and technical capabilities of an organization.