

<b>Module number</b> 32.1	<b>Module title</b> Project Management – Methods and Tools		
<b>Code</b> PRM	<b>Semester</b> 6/7	<b>Number of WSH</b> 4	<b>Module offered</b> Summer Semester
<b>Lecturer</b> Prof. Dr. Jaritz	<b>Tuition type</b> Seminar-style tuition with case studies and exercises		<b>Compulsory/Elective</b> Compulsory
<p><b>Learning outcomes</b></p> <p>The qualification goals mentioned below are subdivided into three dimensions. Each dimension corresponds to a target competence level. The following competence levels have been defined:</p> <ul style="list-style-type: none"> <li>• Competence level 1 (awareness): cursory awareness of simple structures, only previously learned knowledge is tested</li> <li>• Competence level 2 (comprehension): basic understanding of multiple structures up to deeper understanding of the relations between structures, learned knowledge is analysed, combined and applied</li> <li>• Competence level 3 (deep understanding and application): deeper understanding of the relations between structures up to independent transfer and extension of knowledge to new structures, learned knowledge is critically questioned and/or evaluated, interrelations between structures and their consequences are reflected and explained</li> </ul> <p>The competence level of the respective qualification goal is represented by the corresponding number (1, 2 or 3) in the competence descriptions below.</p> <p>On completing the module the students will have achieved the following learning outcomes on the basis of scientific methods:</p> <p><u>Subject skills</u></p> <p>Students know how to apply general methods of business administration to practical application situations (2). They understand the organizational context, different project settings and their requirements with respect to project management (2). Participants are able to recognize and systematically apply approaches, methods and tools to project management and understand key success factors (2).</p> <p><u>Social skills</u></p> <p>Students are aware of particular challenges in traditional and agile project environments (2). They are able to contribute to project management discussions with profound arguments (2). Students are experienced working in groups to resolve individual tasks and presenting their results (1). Moreover, they are able to apply english project management vocabulary (3).</p> <p><u>Method skills</u></p> <p>Students are familiar with a comprehensive project management toolbox (3). This enables them to purposefully plan, monitor and control projects within an application-oriented environment (2). They are able to select and apply different project management methods as well as tracking tools and KPIs (3).</p> <p><u>Personal skills</u></p> <p>Students are able to tackle business-related problems on their own initiative by applying scientific methods to a practical application situation (2). They are self-reliant and possess critical abilities and decision-making skills (2).</p>			

## Content

Nowadays, most upcoming tasks in companies are handled as projects. However, the proportion of failed projects tends to be fairly high, mainly due to the fact that project management was inadequate. One of the key competence in project management today is to be able to select and apply suitable methods and tools that considers the specific project context. Consequently, this module covers different methods and tools in the areas of traditional and agile project management.

- Project management fundamentals
  - Definitions and different project management approaches (traditional and agile)
  - Framework for decision about right project management approach
  - Project initiation phase with request for proposals (RfP) and proposals
- Agile project management methods
  - Agile mindset and agile manifesto
  - Scrum I: Framework with roles, ceremonies and artifacts
  - Scrum II: Comprehensive preparation program for the recognized Scrum certificate “Professional Scrum Master I (PSM I)” as issued by scrum.org
  - Large Scale Scrum (LeSS)
  - Scrumban
  - Kanban
  - Design Thinking
- Traditional project management method
  - Project planning tools such as work breakdown structure, Gantt chart, cost and resource planning and risk management
  - Project monitoring and control tools such as stage gate process, S curve, Gantt chart, milestone trend analysis, Earned Value, status reporting, project scorecard, stakeholder management
- Project portfolio management
  - Organization: Project Management Office (PMO) and Project Office (PO)
  - Project portfolio management tools to select, plan, and monitor portfolio

## Literature

### Required reading

Teaching materials (all in English language)

Scrum Guide (latest version)

### Additional recommended reading

Cobb, Charles, G. (2011): Making Sense of Agile Project Management, John Wiley & Sons, Hoboken.

Cross, Nigel (2020): Design Thinking: Understanding How Designers Think and Work, Berg, Oxford.

Kerzner, Harold R. (2017): Project Management: A Systems Approach to Planning, Scheduling, and Controlling, 12th ed., John Wiley & Sons, Hoboken.

Larman, Craig (2016): Large-Scale Scrum: More with Less, Addison-Wesley, Upper Saddle River.

Larson, Erik W.; Gray, Clifford F. (2017): Project Management: The Managerial Process, 7th ed., McGraw-Hill, New York.

<p>Meredith, Jack R.; Mantel, Samuel J.; Shafer, Scott M. (2019): Project Management – A Managerial Approach, 10th ed., John Wiley &amp; Sons, Hoboken.</p> <p>Project Management Institute (2017) (Editor): A Guide to the Project Management Body of Knowledge (PMBOK® Guide), 6th ed., Project Management Institute, Newtown Square.</p> <p>Rubin, Kenneth, S. (2013): Essential Scrum, Addison-Wesley, Upper Saddle River.</p> <p><a href="http://www.pmi.org">http://www.pmi.org</a></p> <p><a href="http://www.scrum.org">www.scrum.org</a></p>		
<p><b>Teaching and learning methods</b></p> <p>Seminar tuition</p> <p>Exercises</p> <p>Group assignments and group discussions</p> <p>Peer-to-peer learning</p> <p>Case studies and examples from practice</p> <p>Guest speakers will be invited (English or German speaking)</p>		
<p><b>Type of examination/Requirements for the award of credit points</b></p>		<p>Written examination</p> <p>Duration 90 minutes</p>
<p><b>Other information</b></p>		<p>Students can obtain the Professional Scrum Master I (PSM I) certificate (scrum.org). Preparation will take place in class.</p>
<p><b>ECTS Credits</b></p> <p>5</p>	<p><b>Workload</b></p> <p>150 hours</p> <p>Contact/attendance time: 60 h</p> <p>Additional work: 90 h</p>	<p><b>Course language</b></p> <p>English</p>