Syllabus
BIS6311E Project Management on the Basis of PMI
Thomas Slizyk
Winter Semester 2021/22
(v2, 20. Sep. 2021)

Level	Master
Credits	3
Student Contact Hours	4 (45 minutes)
Workload	90 hours (45 minutes), with 36 hours within class (7 lectures, 1 case study presentation, 1 feedback session), 6 hours for homework exercises and 48 hours for the preparation of the case study (required are a project definition report and a project status report), all of it as teamwork.
Prerequisites	None
Time	Fridays, 13:45 – 15:15 and 15:30 – 17:00
Room	W4.2.02
Start Date	8. Oct. 2021
Lecturer(s)	**Name**	Thomas Slizyk, Senior Project Manager, PMP®
	Office	-
	Virtual Office	-
	Office Hours	only request and by arrangement
	Phone	-
	Email	thslizyk@gmail.com

Summary

The lecture provides a general overview on Project Management. It is based on the methodology outlined in the "Project Management Body of Knowledge" (5th edition) of the Project Management Institute, Pennsylvania, USA, but structured and presented from a practitioner's daily experience.

The focus is to provide a solid understanding of the basic concepts, processes, and methods of project management. Agile methods are not specifically part of this lecture, but there will be references to them, to develop an understanding where agile methods have their benefits and should be used, and where they have their limitations, and the "traditional" project management approach would be more appropriate.

The objective of this lecture is to guide the students how to put the theoretical concepts into action, illustrated by a case study the students will elaborate and by the presentation of their results.

The lecturer wants to emphasize his expectation of having interactions with the students and discussions on the subjects presented.

Outline of the Course

Lesson / Subject	Focus Area	Learning Objectives *At the end of each lesson the student should have understood and be able to tell …*
Fundamentals	▪ Basic definitions ▪ Organizational structures ▪ Environmental factors ▪ Project determination and decision-making criteria ▪ Project charter ▪ Project management plan ▪ Project change management ▪ Agile methods vs "traditional" project/program management	▪ What is a Project, a Program, and a Portfolio? ▪ What is Project Management? ▪ What are the major focus areas of a project manager (PM)? ▪ What is a Project Management Office (PMO) and what are its objectives? ▪ What is a project life cycle and what are processes and process groups? ▪ How does the company's organizational structure in which the project is executed influence the project and the power of the project manager? ▪ What are environmental factors and how could they influence the project and the project manager? ▪ How can an organization determine which project to choose, if it must select one out of many? ▪ What are decision making criteria? ▪ What is a Project Charter? ▪ What is a Project Management Plan? ▪ What is Project Change Control and a Project Change Management plan? ▪ Where are the benefits for an agile approach and where are its limits?
Scope management	▪ The Work Breakdown Structure (WBS) ▪ Determine the project's scope and deliverables ▪ The RACI Matrix ▪ Statement of Work and Project Scope Statement ▪ Project Plan	▪ What how to determine the scope and deliverables of your project? ▪ What is a Work Breakdown Structure (WBS) and how can it be created? ▪ What is a RACI matrix? ▪ What is a Statement of Work (SOW)? ▪ What is Project Scope Statement and how can it be set-up?

Lesson / Subject	Focus Area	Learning Objectives *At the end of each lesson the student should have understood and be able to tell …*
		▪ How to create a high-level project plan?
Time management	▪ Estimating techniques ▪ Basic terms & techniques of time management ▪ Milestone trend analysis ▪ Methods to create network diagrams	▪ Basics about estimating time and cost ▪ What is a network diagram? ▪ What is a critical path and how can it be calculated? ▪ What is a milestone? ▪ How to create a milestone trend analysis? ▪ What is a float? ▪ What is a lead or a lag?
Cost management	▪ Basic terms & techniques of cost management ▪ Budget determination ▪ The Earned Value Method	▪ What is a present value and net present value? ▪ What are sunk cost and opportunity cost? ▪ How is a project budget being set-up? ▪ Know the details about Earned Value and how to determine cost variances, indices, forecasts, and understand what they can tell you about the status of your project.

Human Resource management	▪ Resource planning and team building
	▪ Power of management and management styles
	▪ Conflict management
	▪ Motivation and motivation theories
	▪ Develop mindfulness to prevent burn-out situations
		▪ How to plan the resources for your project team?
		▪ What are the basic team building processes?
		▪ How to basic principles of how to manage people:
		  - know forms of power as (project) manager,
		  - know / be aware of the various styles of leadership,
		  - know about the five deadly diseases of western management.
		▪ Understand the basics of conflict management.
		▪ What drives or prevents motivation?
		▪ Know some important motivation theories and concepts (Maslow, Herzberg, McClelland, McGregor).

Communications and Stakeholder management	▪ Communication models, methods & technologies ▪ Interpersonal and management skills ▪ Stakeholder identification & analysis ▪ Stakeholder assessment matrix ▪ Stakeholder register	▪ How communication functions in general? ▪ Know when and why to use the appropriate communication technology? ▪ Know the means of a communications management plan. ▪ Know how to identify your stakeholders. ▪ Know how to assess your stakeholders. ▪ Know how to set-up a stakeholder register and a power-interest matrix.
Risk and Issue Management	▪ Risk types and categories ▪ Concepts of risk identification ▪ Concepts for qualitative and quantitative risk analysis ▪ Strategies for threats ▪ Strategies for opportunities ▪ Risk register and the risk probability & impact matrix	▪ What is the difference between risk and issue? ▪ What is the difference between probability and impact? ▪ What are the types of risk? ▪ What are negative and positive risks? ▪ What are the strategies to approach threats? ▪ What are important risk identification techniques? ▪ How to setup a risk register?
Quality management	▪ Basic terms of (project) quality management ▪ Important quality researchers	▪ Who are Pareto, Deming, Ishikawa, Juran, Crosby and what are their major (quality) concepts? ▪ What are the seven basic quality tools?

Lesson / Subject	Focus Area	Learning Objectives *At the end of each lesson the student should have understood and be able to tell …*
	▪ Quality concepts ▪ Quality tools and techniques ▪ Cost of quality	▪ What is a normal distribution and a standard deviation? ▪ What are the cost of quality, and which fundamental differences exist in the approaches to cost of quality?
Procurement management	▪ Basic terms of project procurement ▪ Regulatory requirements (e.g. ITAR, FDA, BAFIN) and data privacy laws ▪ Fixed-price contracts ▪ Cost contracts ▪ Time & material contacts ▪ The German contract types "Dienstvertrag" and "Werkvertrag"	▪ What are basic terms of project procurement? ▪ What are fixed-price contracts, cost contracts, and time & material contracts? ▪ Which important (international and local) legal and regulatory requirements may impact my contract and project? ▪ What are the major legal requirements and regulations in Germany when hiring sub-contractors for my project, know the details and implications of "Dienstvertrag" and "Werkvertrag"?

Lesson / Subject	Focus Area	Learning Objectives *At the end of each lesson the student should have understood and be able to tell …*

Alignment matrix to MIS learning objectives

Goal at program level	Learning Objectives	Course Contribution
1. Responsible leadership in organizational contexts	1.1 Knowledge of relevant management principles	Fundamental understanding of team building processes, motivation, communication models, methods & technologies, conflict management and leadership (see sessions on HR and Communication Mgmt)
	1.2 Abilities to apply relevant management principles	Not applicable
	1.3 Critical reflections of relevant management principles	Examples to learning objectives stated under goal 1.1
	1.4 Competency to act in a responsible way	Not applicable
2. Creative problem-solving skills in a complex business environment	2.1 Ability to identify, to demarcate, and to classify problems	During any project problems (that is, issues) can occur any time in any part of the project, e.g. scope, time, budget, but also with all people involved. Therefore, we will throughout the lecture repeatedly come back ▪ how to identify issues (e.g. in the sessions of scope, time, cost mgmt. and in HR and stakeholder mgmt.), ▪ how to deal with issues (e.g. in change mgmt., earned value analysis, critical path analysis) ▪ and better, how to anticipate issues prior they occur (i.e. in risk mgmt.).
	2.2 Ability to analyze problems	
	2.3 Ability to solve problems creatively and implement appropriate solutions in practice	
	2.4 Ability to clarify, explain and illustrate problems	
3. Research skills and their practical application	3.1 Knowledge of relevant methods	Not applicable
	3.2 Competency to apply relevant research methods in practice	Not applicable
	3.3 Ability to achieve innovative results by using relevant research methods	Not applicable
4. Design skills for specific IT management solutions or IT technology management architectures within complex process structures	4. 1 Show sound IT competency and achieve IT-specific expertise	Not applicable
	4.2 Ability to use appropriate problem-solving methods for IT-specific tasks	Get an understanding where an agile approach is appropriate and beneficial and where the "traditional" project management methodologies should be preferred
	4.3 Ability to recognize causal problems for IT- specific tasks and to solve them	Not applicable

Teaching and Learning Approach

My aim is to contribute to your studies' success. With this course, I want to support you of not only accumulating theoretical knowledge but that you get – as far as this is possible in a lecture of one semester – practical experience on how to setup a project, evaluate its status of performance, monitor, and control its progress, and present its status to the senior executive management.

Therefore, I make it my objective to enrich the theoretical lessons with practical exercises and a case study derived from real life projects and experience.

Any recommendation to improve the lecture and comments that might help all participants are at any time highly welcomed. In case of any issues please do not hesitate to contact me.

I wish you an interesting lecture and a successful semester. Good luck!

Thomas Slizyk

Literature and Course Materials

The lecture is based on:

- A Guide to the Project Management Body of Knowledge (PMBOK® Guide),
  Fifth Edition, © 2013, ISBN 978-1-935589-67-9, Project Management Institute Inc., 14 Campus Boulevard, Newton Square, Pennsylvania, USA

Other helpful material or information:
- Phil Abernathy videos about Agile topics on YouTube, e.g., Introduction to Agile (6 lectures)
  https://www.youtube.com/watch?v=ZLrJVksmVfs&list=PLsW0ra2Ec8_HFsoawTt3MAG5mJ3gkWHIj
- Rita Mulcahy, "PMP® Exam Prep", RMC Publications Inc., 2009, 6th Edition,
  ISBN 978-1-932735-18-5
  <u>Note:</u> this version is still aligned to PMBOK, 4th edition! (Later versions are available, but not any longer from Rita Mulcahy herself)
- Harold Kerzner, „Project Management: A Systems Approach to Planning, Scheduling, and Controlling", 11th edition
  <u>Note:</u> helpful to look up information, but not actually to learn from.
- The Portable PMP® Exam Prep, „Conversations on Passing the PMP® Exam" by J. LeRoy Ward, PMP®, PgMP® and Carl L. Pritchard, PMP®, 2009, 4thEdition, 9 CDs
  <u>Note:</u> very interesting to listen to, but expensive (not recommended to buy) and still based on PMBOK, 4th edition!
- "ITIL® V3-Basiswissen", Addison-Wesley, 2008
- „ITIL® V3 – "Das Taschenbuch", Van Hare Publishing, 6. Auflage, 2010
- Dieter Hansch: Burnout, Mit Achtsamkeit und Flow aus der Stressfalle, Knaur Verlag 2014, ISBN 978-3-426-65742-3
- David G. Myers, "Psychologie", Springer Verlag 2005

Interesting to read
- Tom DeMarco, „Der Termin, Ein Roman über Projektmanagement", Hanser Verlag 1998
- Eliyahu M. Goldratt, The Goal, 1st edition 1984, ISBN 978-088427-195-6,
  Novel about continuous improvement and process optimization
- Lothar J. Seiwert, „Mehr Zeit für das Wesentliche",
  Verlag Moderne Industrie, 10. Auflage, 1989

Schedule

Planned, but eventually not yet final dates.

Date	Content
8. Oct. 2021	Introduction to lecture, expectations, objectives, timetable
	Project Management Fundamentals
15. Oct. 2021	Scope and Time Mgmt.
	Introduction to Case Study
22. Oct. 2021	Exercises to Scope and Time Mgmt.
	Q+A session to case study
29. Oct. 2021	Cost and Risk Mgmt.
	Exercises and Q+A session to case study
5. Nov. 2021	Communications and Stakeholder Mgmt.,
	Exercises and Q+A session to case study
12. Nov. 2021	Human Resources, Quality and Procurement Mgmt.
	Q+A sessions to case study
19. Nov. 2021	Burnout Awareness/Prevention.
	Monitored case study teamwork including team related Q+A sessions
26. Nov. 2021	*No lecture – submission of case Study on 30.11.2021*
3. Dec. 2021	Students' presentation of case study results
10. Dec. 2021	Feedback and Results

Academic Integrity and Student Responsibility

It is key for your success of the case study and the documents you need to prepare and present, that you read the case study documents in the first week of the lecture (and repeatedly later on) very carefully, alone but also together with your team, and prepare questions you want to ask during the Q+A sessions in the lecture.

Another very important prerequisite to your success is the team building! Please do this as early as possible. Latest in the 2nd lecture all of you should know to which team you belong to!

Also, use the exercises to get more familiar with the project work activities.

Last not least: project work is teamwork and lives by communication! Therefore, get yourself organized as a team and ask questions wherever appropriate!