syllabus

1. Information regarding the programme

1.1 Higher education institution	**Babeş-Bolyai University**
1.2 Faculty	**Faculty of Mathematics and Computer Science**
1.3 Department	**Department of Computer Science**
1.4 Field of study	**Computers and Information Technology**
1.5 Study cycle	**Bachelor**
1.6 Study programme / Qualification	**Information Engineering**

2. Information regarding the discipline

2.1 Name of the discipline (en) (ro)			Software project management Managementul proiectelor software				
2.2 Course coordinator			Lect. Dr. Suciu Dan Mircea				
2.3 Seminar coordinator			Lect. Dr. Suciu Dan Mircea				
2.4. Year of study	**4**	2.5 Semeste	**7**	2.6. Type of evaluation	**E**	2.7 Type of discipline	**Compulsory DS**
2.8 Code of the discipline		MLE7032					

3. Total estimated time (hours/semester of didactic activities)

3.1 Hours per week	4	Of which: 3.2 course	2	3.3 seminar/laboratory	1 S 1 LP
3.4 Total hours in the curriculum	56	Of which: 3.5 course	28	3.6 seminar/laboratory	28
Time allotment:					hours
Learning using manual, course support, bibliography, course notes					10
Additional documentation (in libraries, on electronic platforms, field documentation)					10
Preparation for seminars/labs, homework, papers, portfolios and essays					10
Tutorship					10
Evaluations					4
Other activities:					

3.7 Total individual study hours	44
3.8 Total hours per semester	100
3.9 Number of ECTS credits	4

4. Prerequisites (if necessary)

4.1. curriculum	·
4.2. competencies	·

5. Conditions (if necessary)

5.1. for the course	· Video projector
5.2. for the seminar /lab activities	· Video projector

6. Specific competencies acquired

Professional competencies	C3.1 Identifying classes of problems and solving methods that are specific to computing systems C3.2 Using interdisciplinary knowledge, solution patterns and tools, making experiments and interpreting their results C3.3 Applying solution patterns using specific engineering tools and mehods C3.4 Comparatively and experimentaly evaluation of the alternative solutions for performance optimization C3.5 Developing and implementing information system solutions for concrete problems
Transversal competencies	CT1 Honorable, responsible, ethical behavior, in the spirit of the law, to ensure the professional reputation CT2 Identifying, describing and conducting processes in the project management field, undertaking different team roles and clearly and concisely describing own profesional results, verbally or in writing. CT3 Demonstrating initiative and pro-active behavior for updating professional, economical and organizational culture knowledge

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	· acquiring knowledge and skills necessary for a process of management of IT projects
7.2 Specific objective of the discipline	· identifying the aspects that make Agile methodologies superior to predictive methodologies for software projects · identifying the strengths and weaknesses of each of today Agile practices · identifying the life cycle of a software project in an Agile context

8. Content

8.1 Course	Teaching methods	Remarks
1. Introduction in Agile Methodologies	· Interactive exposure · Explanation · Conversation · Didactical	

	demonstration	
2, 3, 4. Scrum – Roles, Ceremonies, Artefacts	· Interactive exposure · Explanation · Conversation · Didactical demonstration	
5, 6. Extreme Programming	· Interactive exposure · Explanation · Conversation · Didactical demonstration	
7. Lean Software Development	· Interactive exposure · Explanation · Conversation · Didactical demonstration	
8, 9. Kanban	· Interactive exposure · Explanation · Conversation · Didactical demonstration	
10. Other Agile Methodologies: DSDM, Crystal	· Interactive exposure · Explanation · Conversation · Didactical demonstration	
11. Other Agile Methodologies: Agile Unified Process, Feature Driven Development	· Interactive exposure · Explanation · Conversation · Didactical demonstration	
12. Agile Contracts	· Interactive exposure · Conversation	
13. Risk Management in an Agile Environment	· Interactive exposure · Conversation	
14. The future of Agile	· Interactive exposure · Conversation	

Bibliography

1. Jeff Langr, Tim Ottinger - Agile in a Flash: Speed-Learning Agile Software Development, Pragmatic Bookshelf, 2011
2. Esther Derby, Diana Larsen - Agile Retrospectives: Making Good Teams Great, Pragmatic Bookshelf, 2006
3. Thomas Stober, Uve Hansmann - Agile Software Development, Best Prectices for Large Software Development Projects, Springer 2010

4. Mike Cohn - Succeeding with Agile Software Development using Scrum, Addison-Wesley, 2010
5. Gene Kim, Kevin Behr, George Spafford - The Phoenix Project: A Novel About IT, DevOps, and Helping Your Business Win, 2013
6. Darrell K. Rigby, Sarah Elk, Steven H. Berez - Doing Agile Right: Transformation Without Chaos, 2020
7. Geoff Watts - Product Mastery: From Good to Great Product Ownership, 2018
8. Mattias Skarin - Real-World Kanban: Do Less, Accomplish More with Lean Thinking, 2015

8.2 Laboratory	Teaching methods	Remarks
1. Leadership and management	Dialogue, debate, case studies, examples, proofs	The seminar is structured as 2 hours classes every second week
2. Customer Alignment	Dialogue, debate, case studies, examples, proofs	
3, 4. Emotional intelligence	Dialogue, debate, case studies, examples, proofs	
5. Cultural awareness	Dialogue, debate, case studies, examples, proofs	
6. Coaching	Dialogue, debate, case studies, examples, proofs	
7. Self-Organizing Teams	Dialogue, debate, case studies, examples, proofs	

Bibliography

1. Timothy S. Hatten - Small Business Management: Creating a Sustainable Competitive Advantage, SAGE Publications, 2019
2. George S Day, Paul J H Schoemaker: See Sooner, Act Faster - How Vigilant Leaders Thrive in an Era of Digital Turbulence, MIT Press, 2019
3. Sacolick, Isaac: Driving Digital - The Leader's Guide to Business Transformation Through Technology, Amacom, 2017
4. Kouzes James - The leadership challenge: how to make extraordinary things happen in organizations, Jossey-Bass, 2017

8.2 Seminar	Teaching methods	Remarks
1. Leadership and management	Dialogue, debate, case studies, examples, proofs	The seminar is structured as 2 hours classes every second week
2. Customer Alignment	Dialogue, debate, case studies, examples, proofs	
3, 4. Emotional intelligence	Dialogue, debate, case studies, examples, proofs	
5. Cultural awareness	Dialogue, debate, case studies, examples, proofs	
6. Coaching	Dialogue, debate, case studies, examples, proofs	
7. Self-Organizing Teams	Dialogue, debate, case	

	studies, examples, proofs	

Bibliography

1. Timothy S. Hatten - Small Business Management: Creating a Sustainable Competitive Advantage, SAGE Publications, 2019
2. George S Day, Paul J H Schoemaker: See Sooner, Act Faster - How Vigilant Leaders Thrive in an Era of Digital Turbulence, MIT Press, 2019
3. Sacolick, Isaac: Driving Digital - The Leader's Guide to Business Transformation Through Technology, Amacom, 2017
4. Kouzes James - The leadership challenge: how to make extraordinary things happen in organizations, Jossey-Bass, 2017

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

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10. Evaluation

Type of activity	Evaluation criteria	Evaluation methods	Share in the grade (%)
Course	- know the basic principle of the domain; - apply the course concepts	- Continuous application of learnt concepts in distinct weekly missions	50%
Seminar/lab activities	- problem solving	- Continuous observations	50%
Minimum performance standards			
· The final grade should be at least grade 5 (from a scale of 1 to 10)			

Date	Signature of course coordinator	Signature of seminar coordinator
May 2022	Lect. Dr. Dan Mircea Suciu	Lect. Dr. Dan Mircea Suciu

Date of approval

Signature of the head of department

Prof. dr. Laura Dioşan

24.05.2022