#### **SYLLABUS**

#### **1. Information regarding the programme**

1.1 Higher education	Babeş Bolyai University
institution	
1.2 Faculty	Faculty of Mathematics and Computer Science
1.3 Department	Department of Computer Science
1.4 Field of study	Computer Science
1.5 Study cycle	Master
1.6 Study programme /	Distributed Systems in Internet
Qualification	

#### 2. Information regarding the discipline

2.1 Name of the d	iscipline	Agile Software Development						
2.2 Course coordin	nator	Lect. PhD Dan Mircea Suciu						
2.3 Seminar coord	2.3 Seminar coordinator			Lect. PhD Dan Mircea Suciu				
2.4. Year of study 1	2.5 Semester	3	2.6. Type of evaluation E 2.7 Type of Optional					
			discipline					

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

3.1 Hours per week	4	Of which: 3.2 course	2	3.3	1sem
				seminar/laboratory	+ 1 pr
3.4 Total hours in the curriculum	56	Of which: 3.5 course	28	3.6	28
				seminar/laboratory	
Time allotment:					Hours
Learning using manual, course support, bibliography, course notes					
Additional documentation (in libraries, on electronic platforms, field documentation)					
Preparation for seminars/labs, homework, papers, portfolios and essays					
Tutorship					2
Evaluations					3
Other activities:					
3.7 Total individual study hours		119			
3.8 Total hours per semester		175			

#### 4. Prerequisites (if necessary)

3.9 Number of ECTS credits

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4.1. curriculum	-
4.2. competencies	-

7

# 5. Conditions (if necessary)

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

#### 6. Specific competencies acquired

orspecific	
<b>Professional</b> competencies	<ul> <li>Identification and understanding of basic concepts of the following specific Agile methodologies: Scrum, Extreme Programing, Kanban, Lean Software Development.</li> <li>Identification and explanation of basic Agile practices</li> </ul>
Transversal competencies	<ul> <li>Formal communication in organizations</li> <li>Project task time and effort estimation</li> <li>Change management</li> </ul>

# 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	<ul> <li>identifying the aspects that make Agile methodologies superior to predictive methodologies for software projects</li> <li>identifying the strengths and weaknesses of each of today Agile practices</li> <li>identifying the life cycle of a software project in an Agile context</li> </ul>

## 8. Content

8.1 Course	Teaching methods	Remarks
	<ul><li>Interactive exposure</li><li>Explanation</li></ul>	
1. Introduction in Agile Methodologies	<ul> <li>Conversation</li> <li>Didactical demonstration</li> </ul>	
2, 3, 4. Scrum – Roles, Ceremonies, Artefacts	<ul> <li>Interactive exposure</li> <li>Explanation</li> <li>Conversation</li> <li>Didactical demonstration</li> </ul>	
5, 6. Extreme Programing	<ul> <li>Interactive exposure</li> <li>Explanation</li> <li>Conversation</li> <li>Didactical demonstration</li> </ul>	
7. Lean Software Development	<ul> <li>Interactive exposure</li> <li>Explanation</li> <li>Conversation</li> <li>Didactical demonstration</li> </ul>	

8 - 9. Kanban       • Interactive exposure         8 - 9. Kanban       • Explanation         10. Other Agile Methodologies: DSDM, Crystal       • Interactive exposure         10. Other Agile Methodologies: DSDM, Crystal       • Explanation         11. Other Agile Methodologies: Agile Unified Process, Feature Driven Development       • Interactive exposure         12. Agile Contracts       • Interactive exposure         13. Risk Management in an Agile Environment       • Interactive exposure         14. The future of Agile       • Interactive exposure         13. Risk Management in an Agile Environment       • Conversation         14. The future of Agile       • Interactive exposure         • Conversation       • Conversation         13. Risk Management in an Agile Environment       • Conversation         • Interactive exposure       • Conversation         • Stockeding with Agile Software Development, Pragmatic Booksheff, 2010       • Conversation         • J. Het Cauter of Agile       • Conversation         • Interactive exposure								
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7. Optimization of development flow	Dialogue, debate, case				
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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

#### **10. Evaluation**

Type of activity	Evaluation criteria	Evaluation methods	Share in the grade (%)					
Course	<ul> <li>know the basic</li> <li>principle of the domain;</li> <li>apply the course</li> <li>concepts</li> <li>problem solving</li> </ul>	completion of individual missions that will be activated weekly	80%					
Seminar/lab activities	Evaluation of a 15 minutes optional presentation about applying Agile practices in real projects	<ul> <li>oral examination</li> <li>Continuous</li> <li>observations</li> </ul>	20%					
Minimum performance standards								
The final grade should be at least grade 5 (from a scale of 1 to 10)								

Signature of course coordinator				Sig	Signature of seminar coordinator							tor
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Lect. PhD. Dan Mircea Suciu

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Signature of the head of department