Study Programme: Information Technologies	
Course Unit Title: Information Systems Development Process	
Course Unit Code: IT624	
Name of Lecturer(s): Srđan Škrbić	
Type and Level of Studies: Bachelor Academic Degree	
Course Status (compulsory/elective): Elective	
Semester (winter/summer): Summer	
Language of instruction: Serbian (primary), English (secondary)	
Mode of course unit delivery (face-to-face/distance learning): Face-to-face	
Number of ECTS Allocated: 6	
Prerequisites: None	

Course Aims:
This course covers two important aspects related to the process of development of information systems - selection and evaluation of methodologies and management of the system development process and aims to consider the range of problems that the success of the information system development project depends on.

Learning outcomes
Minimal: At the end of the course, it is expected that students demonstrate the ability to discuss the features and disadvantages of various information systems development methods and the issues involved in their acceptance, the need for agility in managing organizational relationships and the importance of successful reporting and communication structures and ways in which the benefits of the system can be evaluated.
Desirable: At the end of the course, it is expected that a successful student demonstrates the ability to identify the major planning issues and staff involved in managing the information system development project, recommend appropriate techniques and methods for the given project, and select the appropriate methodology for the given information system development project and justify the choice.

Syllabus
Theoretical lectures
At the beginning of the course, the concept of project and project management is addressed, with emphasis on software projects. Then, the product and service improvement and CRM (Customer Relationship Management) are processed. The first part of the course ends with an overview of the characteristics of software processes. The second part of the course deals with Rational Unified Process. Phases and iterations, static structure of processes, workflows, integration with tools, etc. are introduced. The third, central part of the course is dedicated to agile methodologies and within the framework of the program, the basics of extreme programming, Scrum, Kanban and DSDM (Dynamic Systems Development Method) are introduced. The emphasis is on mastering Scrum.
Practical lectures
In the first part, the practical lessons are devoted to agile methodologies with emphasis on Scrum. A Scrum project management tool is introduced. A Scrum case study is processed in teams, so that each team applies Scrum techniques and runs a smaller software project using the adopted tool.

Required Reading:
1. Marković, V.: Informatičko sazrevanje kompanije. Budućnost, 2005.
2. Essentials of Rational Unified Process. IBM Courseware.
3. Jeff Sutherland, "Scrum: The Art of Doing Twice the Work in Half the Time", Crown Business, 2014.
4. Chris Sims, Hillary Louise Johnson, "Scrum: a Breathtakingly Brief and Agile Introduction", Dymaxicon, 2012.
5. Andrew Stellman, Jack P. Greene, "Learning Agile: Understanding Scrum, XP, Lean, and Kanban", O'Reilly, 2014.

Weekly Contact Hours: 4	**Lectures:** 2	**Practical work:** 2

Teaching Methods:
In the lectures, classical teaching methods using video beam are used to present the topics. In practice, classical teaching methods, using video beam and computers with the necessary software installed are used to practically train skills by getting to know the recommended tools. The premise for successful exercises is the existence of a sufficient number of computers so that each student can work individually.

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Colloquia	50	oral exam	50