

Study Programme: Information Technologies		
Course Unit Title: Web Programming		
Course Unit Code: IT602		
Name of Lecturer(s): Vladimir Kurbalija		
Type and Level of Studies: Bachelor Academic Degree		
Course Status (compulsory/elective): Elective		
Semester (winter/summer): Winter		
Language of instruction: Serbian (primary), English (secondary)		
Mode of course unit delivery (face-to-face/distance learning): Face-to-face		
Number of ECTS Allocated: 7		
Prerequisites: None		
Course Aims: Advanced concepts of web programming and the semantic web. Enabling students to apply the acquired knowledge practically, for developing non-trivial, dynamic web presentations and interactive web applications, first and foremost by using the fundamental web technologies (HTML, PHP), and then by using advanced, modern frameworks (Laravel, Symfony). Advanced concepts of content management systems (CMS).		
Learning Outcomes: <i>Minimum:</i> At the end of the course, a successful student is expected to be able to design and implement a simple web presentation, in which the content is presented dynamically. The usage of a back-end database system is mandatory. <i>Desirable:</i> At the end of the course, a successful student is expected to be able to design and implement a complex web application, with a high level of interactivity common in modern, professional web applications.		
Syllabus: <i>Theory</i> Properties of the Web. The client-server architecture. An overview of HTML. Basic concepts of a server-side programming language (PHP). Syntax and semantics. Working with forms. The concept of a session. Establishing database connectivity. An overview of the most important content and document management systems. <i>Practice</i> Practice and understanding of the core principles using illustrative examples. Analysis and practical applications of the advanced concepts introduced in the new HTML5 specification. Practical implementations of web presentations and applications on a dedicated web server.		
Required Reading: 1. Matt Zandstra, Sams Teach Yourself PHP in 24 Hours, Sams Publishing, 2002. 2. Bogdan Brinzarea, Cristian Darie, AJAX and PHP: Building Modern Web Applications 2nd Edition, Packt Publishing, 2010. 3. Matt Doyle, Beginning PHP 5.3, Wiley Publishing, Inc. 2010.		
Weekly Contact Hours: 4	Lectures: 2	Practical work: 2
Teaching Methods: Classical teaching methods using a video beam are applied during lectures. The core principles used in the development of web presentations and applications are explained. Classical teaching methods are also used during theoretical exercises to		

illustrate examples of web presentations and applications. During practical exercises, students work on projects individually, and their work is examined in detail and graded appropriately.

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Active class participation		written exam	
Practical work	60	oral exam	40
Preliminary exam(s)		
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.