

1.	Course title	<b>Multimedia and scalable web</b>		
2.	Course code	SI-I-07		
3.	Study program	<b>Master Studies in Computer Science and Engineering - Software engineering</b>		
4.	Unit offering the course	<b>FCSE</b>		
5.	Undergraduate/master/PhD	<b>Master</b>		
6.	Year/semester 1(2)/winter/elective	7. ECTS: <b>6</b>		
8.	Teacher(s)	Assist. prof. d-r Ivan Chorbev, prof. d-r Dragan Mihajlov		
9.	Course prerequisites	None		
10.	<p>Goals (competences): After course completion the candidates are expected to know how to develop web pages with contemporary design, including structure, architecture, compatibility with various devices, use of cascading styles, usability, etc. Candidates are expected to:</p> <ol style="list-style-type: none"> <li>1. Demonstrate advanced understanding of the importance of good design, interaction and usability of web pages on various platforms and devices.</li> <li>2. Demonstrate practical knowledge for design and usability and application of knowledge when designing effective multimedia web sites.</li> <li>3. To communicate with terminology specific in this area.</li> <li>4. To critically evaluate examples of design and interactivity of web sites, including evaluation of products.</li> <li>5. To demonstrate awareness of strategies related to understanding the needs of users of web multimedia products.</li> </ol>			
11.	<p>Course content: Use of multimedia content in web products including standards and technologies. Use of various multimedia technologies, combinations of multimedia technologies. Design of multimedia web, streaming media, advanced scripting of multimedia contents, testing multimedia web applications, web accessibility, mobile multimedia applications, Adobe Flash, HTML 5 Canvas, Silverlight. Multimedia web applications for mobile devices like smartphones and tablets, but also large screens, TVs. Game development, design, mobile browsers, categories of multimedia content. Scalable web design.</p>			
12.	<p>Teaching methods: Lectures supported by slide presentations, interactive lectures, trainings (using lab equipment and software packages), team work, case studies, invited guests and lectures, individual practical assignments presentations, seminar paper, e-learning (forums, consultations).</p>			
13.	Total available time	6 ECTS x 30 hours = 180 hours		
14.	Distribution of the available time	60 + 0 + 120 = 180 hours		
15.	Teaching activities	15.1.	Lectures	60 hours
		15.2.	Training (labs, problem solving), seminar and team work	0 hours
16.	Other activities	16.1.	Project work	40 hours

		16.2.	Self study	40 hours		
		16.3.	Home work	40 hours		
17.	Grading					
	17.1.	Tests		65 points		
	17.2.	Seminar work/project (written or oral presentation)		25 points		
	17.3.	Active participation		10 points		
18.	Grading criteria		to 59 points	5 (five) (F)		
			from 60 to 68 points	6 (six) (E)		
			from 69 to 76 points	7 (seven) (D)		
			from 77 to 84 points	8 (eight) (C)		
			from 85 to 92 points	9 (nine) (B)		
			from 93 to 100 points	10 (ten) (A)		
19.	Final exam prerequisites		Successfully completed activities 15.1 and 15.2			
20.	Course language		Macedonian and English			
21.	Quality assurance methods		Internal evaluation and student questionnaires			
22.	Literature					
	22.1.	Compulsory				
		No.	Authors	Title	Publisher	Year
		1.	Kim Golombisky, Rebecca Hagen	White Space is Not Your Enemy: A Beginner's Guide to Communicating Visually through Graphic, Web and Multimedia Design	Focal Press; 1 edition	2010
		2.	Jason Beard	The Principles of Beautiful Web Design, 2nd Edition	SitePoint;	2010
		3.	Steve Krug	Don't Make Me Think: A Common Sense Approach to Web Usability, 2nd Edition	New Riders Press	2005
		Additional				
		No.	Authors	Title	Publisher	Year
		1.	Jennifer Niederst Robbins	Web Design in a Nutshell	O'Reilly Media,	2006
		2.				
3.						