1.	Course title	**Advanced web technologies**		
2.	Course code	SI-I-10		
3.	Study program	**Master Studies in Computer Science and Engineering - Software engineering**		
4.	Unit offering the course	**FCSE**		
5.	Undergraduate/master/PhD	**Master**		
6.	Year/semester 1(2)/summer/elective	7. ECTS: **6**		
8.	Teacher(s)	assoc. prof. dr. Dejan Gjorgjevikj, assist. prof. dr. Goce Armenski		
9.	Course prerequisites	None		
10.	Goals (competences): Upon competition of the course the students are expected: to have a clear perception of the concepts, the capabilities and the applications of the advanced web technologies, as well as to utilize them while creating web pages, web applications and integrated solutions using the web.			
11.	Course content: Basics of WWW, HTML forms, HTTP protocol, Cookies, use of CSS in Web design, Server-side and Client-side scripting, DOM and DHTML use of JavaScript for creating dynamic Web presentations. Use of AJAX and XML in creating reach Web applications. Libraraies for developing of AJAX applications (Django, SIMILE, …). Other technologies for developing interactive Web pages and Web applications: ActiveX, Silverlight, Flash, Java Applets. The concept of Web 2.0, semantic web, Collective Intelligence, Web services. Multimedia Web technologies, Web Streaming, Podcasting, Voice-over-IP, Video-on-demand. IPTV, RSS, Web communities, social Web, P2P networks.			
12.	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).			
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	45 hours
		16.2.	Self study	45 hours
		16.3.	Home work	30 hours
17.	Grading			
	17.1.	Tests		45 points

17.2.	Seminar work/project (written or oral presentation)		45 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.	Jeffrey Sambells, Aaron Gustafson	AdvancED DOM Scripting: Dynamic Web Design Techniques	friends of ED	2007
		2.	Matthew Eernisse	Build Your Own AJAX Web Applications	SitePoint	2006
		3.	Emilia Mendes, Nile Mosley	Web Engineering	Springer	2005
	22.2.	Additional				
		No.	Authors	Title	Publisher	Year
		1.				
		2.				
		3.				