

1.	Course title	Mobile web services		
2.	Course code	IIS-I-02		
3.	Study program	Intelligent Information systems		
4.	Unit offering the course	FCSE		
5.	Undergraduate/master/PhD	Master		
6.	Year/semester 1/winter/elective	7. ECTS: 6		
8.	Teacher(s)	Prof. Vladimir Trajkovik		
9.	Course prerequisites	None		
10.	Goals (competences): The student will be able to develop mobile web services.			
11.	Course content: Mobile Services and Web Services definition. Introduction to radio-frequency networks, land based mobile networks, satellite based mobile networks, inner space mobile networks, mobile wireless technologies. Features of different mobile network technologies. Mobile networks convergence. IP based mobile services. Web services. Mobile devices. Mobile service architectures. Mobile services case studies.			
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	130 + 0 + 50 = 180 hours		
15.	Teaching activities	15.1.	Lectures	130 hours
		15.2.	Training (labs, problem solving), seminar and team work	0 hours
16.	Other activities	16.1.	Project work	15 hours
		16.2.	Self study	15 hours
		16.3.	Home work	20 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.	Johan Hjelm	Designing Wireless Information Services	John Wiley & Sons	2000
		2.	Paul Golding	Next Generation Wireless Applications	John Wiley & Sons	2004
	3.	Abbas Jamalipour	The Wireless Mobile Internet: Architectures, Protocols and Services	John Wiley & Sons	2003	
	22.2.	Additional				
No.		Authors	Title	Publisher	Year	
1.						
2.						
3.						