1.	Course title	Mobile Platforms and Programming	
2.	Course code	CSEW519	
3.	Study program		
4.	Unit offering the course	**FCSE**	
5.	Undergraduate/postgraduate/PhD	**Undergraduate**	
6.	Year/semester	7. ECTS: **6**	
8.	Teacher(s)	Assoc. Prof. Vladimir Trajkovik PhD, Assoc. Prof. Dimitar Trajanov PhD, Assoc. Prof. Ljupco Antovski PhD, Assist. Prof. Igor Mishkovski PhD	
9.	Course prerequisites	Object – Oriented Programming	
10.	Goals (competences): After the successful completion of the course, the student will understand and be able to deploy knowledge of mobile operating systems, native mobile application programming and mobile web programming.		
11.	Course content: Mobile Operating Systems. Native and web mobile applications: conceptual differences and development approaches. Mobile applications development concepts with focus on mobility. Mobile infrastructures: mobility vs. wireless. Mobile applications features (multimodal interaction, communications channels, infrastructure limitations). Mobile applications user interfaces and interactions. Mobile users (difficulty to focus, multicultural behaviour influence). User centric methods and tools for Mobile application development. Mobile development platforms and technologies.		
12.	Teaching methods: Lectures supported by presentations with slides, interactive lectures, exercises, team work, case studies, invited guest lecturers, preparation and defence of home works and project works, learning in an e-environment (forums, consultations).		
13.	Total available time	6 ECTS x 30 hours = 180 hours	
14.	Distribution of the available time	30 + 45 + 35 + 35+ 35 = 180 hours	
15.	Teaching activities	15.1.	Lectures	30 hours
		15.2.	Training (labs, problem solving), seminar and team work	45 hours
16.	Other activities	16.1.	Project work	35 hours
		16.2.	Self study	35 hours
		16.3.	Home work	35 hours
17.	Grading			
	17.1.	Tests		60 points
	17.2.	Seminar work/project (written or oral presentation)		30 points
	17.3.	Active participation		10 points
18.	Grading criteria	up to 50 points	5 (five) (F)
		from 51 to 60 points	6 (six) (E)
		from 61 to 70 points	7 (seven) (D)

		from 71 to 80 points	8 (eight) (C)
		from 81 to 90 points	9 (nine) (B)
		from 91 to 100 points	10 (ten) (A)
19.	Final exam prerequisites	Regular Class Attendance (up to three class absence will be allowed), on time admission of home works and project works.	
20.	Course language	Macedonian and English	
21.	Quality assurance methods	Internal evaluations and surveys	

22.	Literature					
	22.1.	Compulsory				
		No.	Authors	Title	Publisher	Year
		1.	Zigurd Mednieks, Laird Dornin, G. Blake Meike, Masumi Nakamura	Programming Android: Java Programming for the New Generation of Mobile Devices, 2nd ed.	O-Reilly Media	2012
		2.	Daniel Vaughan	Windows Phone 7.5 Unleashed	Sams Publishing	2012
		3.	Maximiliano Firtman	Programming the Mobile Web	O'Reilly Media	2010
	22.2.	Mandatory				
		No.	Authors	Title	Publisher	Year
		1.	Different Authors	Internet publications related to mobile platforms and programming		
		2.				
		3.				