

1.	Course title	Structured programming		
2.	Course code	CSEW101		
3.	Study program	Computer Science and Engineering, Computer Networks Technologies, Applied E-Technologies Education of Informatics, Informatics and Computer Engineering, Professional Informatics Studies, Academic Informatics Studies, Professional Information Technologies Studies		
4.	Unit offering the course	FCSE		
5.	Undergraduate/postgraduate/PhD	Undergraduate		
6.	Year/semester	7. ECTS: 6		
8.	Teacher(s)	prof. dr. Dragan Mihajlov, prof. dr. Suzana Loshkovska, assoc. prof. dr. Ana Madevska-Bogdanova, assoc. prof. dr. Dejan Gjorgjevikj, assist. prof. dr. Nevena Ackovska, assist. prof. dr. Ivan Chorbev, assist. prof. dr. Ivica Dimitrovski, assist. prof. dr. Gjorgji Madzarov		
9.	Course prerequisites	None		
10.	Goals (competences): To introduce the students to the Structured programming paradigm, to understand the concept of algorithms and to enable them to develop algorithms, to code, test and compile programs. There will be introduction of data types, control structures, functions, arrays and files.			
11.	Course content: Introduction, Concept of computer science, Programming languages and paradigms, Types of data and operations, Algorithms, Control structures, Functions, Recursion, Complex data structures – arrays, matrices, pointers. Files. Applications: programming language working environment.			
12.	Teaching methods: Lectures supported by presentations with slides, interactive lectures, exercises (use of equipment and software packages), real life examples, invited guest lecturers, preparation and defence of a project work and seminar thesis, 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 + 30 + 75 = 180 hours		
15.	Teaching activities	15.1.	Lectures	30 hours
		15.2.	Training (labs, problem solving), seminar and team work	60 hours
16.	Other activities	16.1.	Project work	30 hours
		16.2.	Self study	30 hours
		16.3.	Home work	30 hours

17.	Grading					
	17.1.	Tests			75 points	
	17.2.	Seminar work/project (written or oral presentation)			15 points	
	17.3.	Active participation			10 points	
18.	Grading criteria			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			Completed activities 15.1 and 15.2		
20.	Course language			Macedonian and English		
21.	Quality assurance methods			Internal evaluation and satisfaction polls		
22.	Literature					
	Compulsory					
	22.1.	No.	Authors	Title	Publisher	Year
		1.	Kernighan B., Ritchie D.	The C Programming Language, 2nd edition	Prentice Hall	1988
		2.	Deitel, Deitel,	How to program, C, 6th edition	Prentice Hall	2010
	3.	Steve Oullaine	Practical C, 3rd edition	O'Reilly	1997	
	Additional					
	22.2.	No.	Authors	Title	Publisher	Year
		1.	Peter Prinz, Tony Crawford	C in a Nutshell	O'Reilly	2005
		2.				
3.						