

1.	Course title	Internet programming		
2.	Course code			
3.	Study program	Computer Science and Engineering, Professional Informatics Studies		
4.	Unit offering the course	FCSE		
5.	Undergraduate/postgraduate/PhD	Undergraduate		
6.	Year/semester	7. ECTS: 6		
8.	Teacher(s)	Prof. Marjan Gushev, Prof. Suzana Loshkovska, Assoc. Prof. Dimitar Trajanov, Assist. Prof. Goce Armenski, Assist. Prof. Gjorgji Madjarov		
9.	Course prerequisites	Object oriented programming		
10.	Goals (competences): Understanding of Internet client side programming. The students will attain knowledge of the technologies and the programming languages related to client side programming. After completing the course, the students will be capable for developing interactive web pages by using compiled and scripting languages.			
11.	Course content: Introduction to Internet client side programming. Programming languages and technologies for client side programming. Internet programming with Java. Threads. Exceptions. Events. Designing of interactive web pages. Graphical libraries. Applets. Basic concepts of scripting programming languages. Client side scripting languages. DOM model. Creating dynamic web pages by using scripting programming languages. User input validation. Creating and using regular expressions. Form creation and validation. Multiplatform compatible scripts for supporting multiple web browsers.			
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 h = 180 h		
14.	Distribution of the available time	30+15+30+30+15+60=180 h		
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	30 hours
		16.3.	Home work	15 hours
		16.3.	Self study	60 hours
17.	Grading			
	17.1.	Tests		80 points
	17.2.	Seminar work/project (written or oral presentation)		15 points
	17.3.	Active participation		5 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	Successful completion of activities 15.2 and 16.1				
20.	Course language	Macedonian and English				
21.	Quality assurance methods	Internal evaluation mechanisms supported by student polls				
22.	Literature					
	22.1.	Compulsory				
		No.	Authors	Title	Publisher	Year
		1.	Dietel, Dietel and Nieto	Internet and World Wide Web - How to program	Pearson Education Publisher	2000
		2.	Patrick Niemeyer and Jonathan Knudson	Learning Java	O'Reilly	2000
	3.	Scott Duffy	How to do everything with JavaScript	McGraw-Hill/Osborne	2003	
	22.2.	Mandatory				
		No.	Authors	Title	Publisher	Year
		1.	Ibrahim Zeid	Mastering the Internet, XHTML, and Javascript	Prentice Hall	2004
		2.	Herbert Schildt.	Java™ 2: A Beginner's Guide	McGraw-Hill/Osborne	2003
3.	Ibrahim Zeid	Mastering the Internet, XHTML, and Javascript	Prentice Hall	2004		