

1.	Course Title	Advanced Human Computer Interaction
2.	Code	F18L3W137
3.	Study program	Software engineering and information systems
4.	Study Program Organizer	Faculty of Computer Science and Engineering
5.	Degree (first, second, third cycle)	first cycle
6.	Academic year / semester 4 / winter / mandatory	7. ECTS credits 6
8.	Teacher	associate professor SoNja Gievska, associate professor Nevena Ackovska
9.	Course enrollment prerequisites	Дизајн на интеракцијата човек-компјутер
10.	Course program goals (competencies):	The students will be acquainted with the basics of the complex interaction between the human and the computer. They will gain knowledge in the techniques for modeling the users, the, problems, the applications and the ambient. They will also learn the techniques for evaluation and analysis of intelligent interfaces. Students will be familiarized with the principles of building interfaces that encompass the limitations of the two affected groups: human and computer. Students will learn that the user is one of the main elements in crating computer systems. They will gain insight in hardware and software development for different user groups, as well as for specific application domains. Students will be familiarized with the principles for building user interfaces adaptable to the environment, agent based intelligent user interfaces, context sensitive interfaces, and intelligent solutions for specific user groups.
11.	Course program content:	Advanced HCI principles. Factors that influence the interaction. Modeling of the user experience. Development of efficient interfaces. HCI for different user groups. Design for users with special needs. Interaction principles for special applications. Technology transfer in HCI. Compatibility in HCI design. Techniques for user modelling. Adaptable user interfaces. Agent based user interfaces. Multimedia user interfaces. Embedded user interfaces. Mobile interfaces. Cognitive aspects of the user interfaces. User interfaces for people with sensor and motor impairment. Testing and evaluation of user interfaces.
12.	Learning methods:	Lectures using presentations, interactive lectures, exercises (using equipment and software packages), teamwork, case studies, invited guest lecturers, independent preparation and defense of a project assignment and seminar work.

13.	Total available time	6 ECTS x 30 hours = 180 hours		
14.	Distribution of the available time	30 + 45 + 15 + 15 + 75 = 180 hours		
15.	Teaching activity forms	15.1.	Lectures – theoretical teaching	30 hours
		15.2.	Exercises (laboratory, auditory), seminar papers, teamwork	45 hours
16.	Other activity forms	16.1.	Project Tasks	15 hours
		16.2.	Independent Learning Tasks	15 hours
		16.3.	Home learning	75 hours
17.	Assessment methodology			
	17.1.	Tests		10 points
	17.2.	Seminar paper/project (presentation: written and oral)		30 points
	17.3.	Activity and learning		10 points
	17.4.	Final exam		50 points
18.	Assessment criteria (points/grade)	up to 50 points		5 (five) (F)
		51 to 60 points		6 (six) (E)
		61 to 70 points		7 (seven) (D)
		71 to 80 points		8 (eight) (C)
		81 to 90 points		9 (nine) (B)
		91 to 100 points		10 (ten) (A)
19.	Course completion and final exam requirements	Realized activities 15.1 and 15.2		
20.	Teaching Language	Macedonian and English		
21.	Teaching quality evaluation method	Internal evaluation mechanisms and questionnaires		
22.	Course Material			
	22.1.	Mandatory course material		

No	Author	Title	Publisher	Year
1	J. Jacko & A. Sears (Eds.)	The Human-Computer Interaction Handbook: Fundamentals, Evolving Technologies and Emerging Applications (3rd ed)	CRC Press	2012
2	D. Benyon, P. Turner, and S. Turner	Designing Interactive Systems. People, Activities, Contexts, Technologies, Third Edition	Addison Wesley	2005
22.2.	Additional course material			
No.	Author	Title	Publisher	Year