1.	Course Title	Advanced Human Computer Interaction								
2.	Code	F18L3W137								
3.	Study program	Software engineering and information systems								
4.	Study Program Organizer	nizer 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.

15.1 Lectures theoretical 30 hote teaching 15.2 Exercises (laboratory, 45 hote auditory), seminar papers, teamwork 16.1 Project Tasks 15 hote 16.2 Independent Learning 15 hote 16.3 Home learning 75 hote 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 17.4 Final exam 50 points 5 (five) (F) 51 to 60 points 6 (six) (E) 61 to 70 points 7 (seven) (f) 10 points 10 p	Total available time					6 ECTS x 30 hours = 180 hours										
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22.1. Mandatory course material	22.1. Mandatory course material															

	No	Author		Title		Publisher		Year				
	1	J. Jacko & A Sears (Eds.)		Emergin	ion ok: entals, g ogies and	CRC Press	S	2012				
	D. Benyon, P. Turner, and S. Turner			Designi Interacti Systems Activition Context Technol Third Ed	ive s. People, es, s, ogies,	Addison Wesley		2005				
22.2.	Additional course material											
	No.	No. Author		Title			Publisher Yea		Year			