

1.	Course title	Human – robot interaction		
2.	Course code	InIS-I-07		
3.	Study program	Intelligent Systems Engineering		
4.	Unit offering the course	FCSE		
5.	Undergraduate/master/PhD	Master		
6.	Year/semester 1(2)/spring/compulsory	7. ECTS: 6		
8.	Teacher(s)	Nevena Ackovska, Boro Jakimovski		
9.	Course prerequisites	None		
10.	<p>Goals (competences): The subjects enables the students to link the researches in human behavior and robotics, and to incorporate the robots in different aspects of human every day life. The students should learn how to develop more natural interaction between humans and robots. Upon completion of this course the students should be able to:</p> <ul style="list-style-type: none"> • understand the need of incorporating robots in everyday life of humans and the ways they enrich the human life. • gain basic knowledge of the use of the robots in various hazardous applications • get introduced to the usefulness of the robot use in enrichment of the social capacities of different user groups. 			
11.	<p>Course content:</p> <ul style="list-style-type: none"> • Social robotics, • Human – computer communication, • Multi modal devices • Sensors and perception in human – robot interaction • Applicative domain: use in aviation, industry, medicine, hazardous environments • Human – robot interaction for special user groups: children, older people, sick and handicapped people 			
12.	<p>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).</p>			
13.	Total available time	6 ECTS x 30 hours = 180 hours		
14.	Distribution of the available time	30+30+40+40+40 = 180 hours		
15.	Teaching activities	15.1.	Lectures	30 hours
		15.2.	Training (labs, problem solving), seminar and team work	30 hours
16.	Other activities	16.1.	Project work	40 hours
		16.2.	Self study	40 hours

		16.3.	Home work		40 hours	
17.	Grading					
	17.1.	Tests			20 points	
	17.2.	Seminar work/project (written or oral presentation)			70 points	
	17.3.	Active participation			10 points	
18.	Grading criteria		to 59 points	5 (five) (F)		
			from 60 to 68 points	6 (six) (E)		
			from 69 to 76 points	7 (seven) (D)		
			from 77 to 84 points	8 (eight) (C)		
			from 85 to 92 points	9 (nine) (B)		
			from 93 to 100 points	10 (ten) (A)		
19.	Final exam prerequisites		Successfully completed activities 15.1 and 15.2			
20.	Course language		Macedonian and English			
21.	Quality assurance methods		Internal evaluation and student questionnaires			
22.	Literature					
	22.1.	Compulsory				
		No.	Authors	Title	Publisher	Year
		1.	Michael A. Goodrich, Alan C. Schultz	Human-Robot Interaction: A Survey	Publishers Inc	2008
		2.	Julie A. Jacko, Andrew Sears	The Human- Computer Interaction Handbook	Lawrence Erlbaum Associates	2008
	22.2.	Additional				
		No.	Authors	Title	Publisher	Year
		1.	Erwin Prassler	Advances in human- robot interaction	Springer	2005
2.						
3.						