1.	Course title	**Agent-based systems**	
2.	Course code	SBP-I-04	
3.	Study program	**Master degree in computer science and engineering Study program: Content-based Retrieval**	
4.	Unit offering the course	**FCSE**	
5.	Undergraduate/master/PhD	**Master**	
6.	Year/semester 1/summer/elective	7. ECTS: **6**	
8.	Teacher(s)	dr. Sonja Gievska	
9.	Course prerequisites	None	
10.	Goals (competences): After completion of the course the student is expected to have the knowledge and skills for designing and development of interfaces suitable for presentation of unstructured data types.		
11.	Course content: Selected topic of this course follows: - Introduction to human-computer interaction - Design concepts, perceptions, modelling - Annotation systems and their components, cognitive aspects in annotation frameworks - Representing artefacts - Real-time computer vision, object recognition - Clark's theory of language use - Cognitive analysis - Activation theory ACT - Socio-psychological theories - Formalism and computation - Application domains – games, e-commerce, e-learning, e-society		
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 hours = 180 hours	
14.	Distribution of the available time	30 + 15 + 135 = 180 hours	
15.	Teaching activities	15.1.	Lectures	30 hours
		15.2.	Training (labs, problem solving), seminar and team work	15 hours
16.	Other activities	16.1.	Project work	60 hours
		16.2.	Self study	25 hours
		16.3.	Home work	50 hours
17.	Grading	17.1.	Tests	15 points

17.2.	Seminar work/project (written or oral presentation)			75 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.	William Sims Bainbridge	Berkshire Encyclopedia of Human-Computer Interaction (2 Volume Set)	Berkshire Publishing Group	2004
		2.	Branislav Kisacanin, Vladimir Pavlovic, Thomas S. Huang	Real-Time Vision for Human-Computer Interaction	Springer	2005
		3.	Nicu Sebe, Michael S. Lew, Thomas S. Huang	Computer Vision in Human-Computer Interaction: ECCV 2004 Workshop on HCI	Springer	2004
	22.2.	Additional				
		No.	Authors	Title	Publisher	Year
		1.	Selected authors	A selected list of research papers from relevant conferences in journals		
		2.				
		3.				