MODELLO D (inglese)	
General Information	
Academic subject	Intelligent Interfaces
Degree course	LAUREA MAGISTRALE DEGREE IN COMPUTER SCIENCE
Curriculum	
ECTS credits	6
Compulsory attendance	NO
Language	English

Subject teacher	Name Surname	Mail address	SSD
	Berardina De Carolis	berardina.decarolis@uniba.it	Inf/01

ECTS credits details			
Basic teaching activities	Intelligent Interfaces	INF/01	

Class schedule	
Period	I Semester
Year	III
Type of class	Lecture- workshops 4 CFU Lecture (32 hours) 1 CFU Workshops (15 hours) 1 CFU Project (25 hours)

Time management	
Hours	150 (78 of individual study)
Hours of lectures	32
Tutorials and lab	15
Project	25

Academic calendar	
Class begins	2nd of October
Class ends	31st of May

Syllabus	
Prerequisites/requirements	
Expected learning outcomes (according to Dublin Descriptors) (it is recommended that they are congruent with the learning outcomes contained in A4a, A4b, A4c tables of the SUA-CdS)	*Knowledge and understanding* Students have to acquire the knowledge about the foundamental principles of intelligent interface research, of methods to design and implement intelligence in interactive systems with particular focus on user modeling and affective computing. *Applying knowledge and understanding* Students have to acquire the knowledge necessary to design and implement intelligence in interactive systems through project and case studies in several application domains. *Making informed judgements and choices* Students have to demonstrate to have acquired autonomy in evaluating and discussing problematics related to intelligent interface research *Communicating knowledge and understanding*

	Students will be able to illustrate the methodologies proper of this discipline and to discuss choices made in the selected case study. *Capacities to continue learning* Students have to demonstrate their capabilities of investigating, learning and self-orienteering in the problematics that arise during the design and implementation of intelligent interfaces
Contents	Methods and Techniques for designing and implementing intelligence in interactive systems. In particular: Analysis of multimodal user input: text – speech (prosody for emotion recognition), computer vision, facial expressions, gestures. User Models: logic-based, probabilistic models, user profiling. Natural Language Generation: template, plans. Dialog Management: models based on ATN – models based on IS – machine learning applied to dialog management. Brain Computing Interfaces Affective Computing Conversational Interfaces Application to innovative contexts (social robots, recommender systems, ambient intelligence, ambient assisted living and gaming).
Course program	
Bibliography	Readings in Intelligent User Interfaces (Interactive Technologies) 1st Edition by Mark Maybury, Wolfgang Wahlster Emotions and Personality in Personalized Services Models, Evaluation and Applications Editors: Tkalčič, M., De Carolis, B., de Gemmis, M., Odić, A., Košir, A. (Eds.) Papers available on the Course Web Page
Notes	Books and Papers are integrated with slides and notes
Teaching methods	Lectures and Workshops
Assessment methods (indicate at least the type written, oral, other)	Project Presentation and Discussion
Evaluation criteria (Explain for each expected learning outcome what a student has to know, or is able to do, and how many levels of achievement there are.	Since the course is oriented to application of artifical intelligence methods to interactive systems, the expected learning outcome will be evaluated through the presentatio and discussion of the selected project/case study. In particular, problem solving abilities and the appopriate use of methods and tools described during the course will be evaluated.
Further information	