

Human Cognition and Virtual Reality (A31) - PROGRAMMA A.A. 2016/2017

	Nome Corso		
	Human Cognition and Virtual Reality		
Docente:	Iachini Santa	SSD: M/PSI-01	
	Ore di lezione: 42	6 CFU	Lingua: english
	santa.iachini@unina2.it		
Prerequisiti:	Basic concepts of general psychology		
Contenuti del corso:	<p>The course aims at providing provide the basics for understanding of VR scenarios and applications.</p> <p>It will focus on the various shades of the “Virtual Reality” concept and its main formats (e.g. Augmented Reality and Immersive Virtual Reality) in comparison with perceptual, emotional and cognitive processes in the natural world. In this perspective, the main devices supporting VR (such as wearable devices and CAVE systems) and various recent human-machine interaction techniques will be analyzed. The concept of “hybrid reality” (embedding of virtual devices and artificial organisms in real world), its effect and potential developments will be discussed.</p>		
Obiettivi Formativi:			
Risultati di Apprendimento:	<p>Good knowledge of the fundamental principles of Virtual Reality (VR) and Immersive Virtual Reality (IVR)</p> <p>Good knowledge of sensorimotor processes in natural and virtual environments</p> <p>Good knowledge of various human-machine interaction paradigms</p>		
Competenze da acquisire:	<p>Ability to apply basic simulation principles for the creation of 3D environments according to specific applied purposes</p> <p>Ability to analyze and devise a multimodal virtual reality project</p> <p>Ability to assess limits and potentialities of VR in relation to actual reality</p>		
Attività di apprendimento previste e metodologie di insegnamento:	Frontal lectures and case study		
Eventuali indicazioni sui materiali di studio:			

Modalità di frequenza:	Twice a week, three hours each
Modalità d'esame:	Written and oral examination Written examination: four-alternative multiple choice test Oral examination: critical discussion of central topics and scientific papers
Prove Intercorso:	Multiple choice tests at the ending of each teaching module
Testi di riferimento:	Morganti F. & Riva G. (2006). Conoscenza, comunicazione e tecnologia. Aspetti cognitivi della realtà virtuale. LED Edizioni Universitarie di Lettere Economia Diritto Slater M. (2009). Place illusion and plausibility can lead to realistic behaviour in immersive virtual environments. Philosophical Transactions of the Royal Society B, 364: 3549-3557. Two articles of your choice among those presented during the course. Foreigner students may choose two more papers instead of the handbook in italian.