

Ambient Intelligence			
Credits: 4 Semester 3 (UJI) Compulsory: No			
Format	Lectures 20 h	Tutorials 5 h, Lab.10h	Private study 80 h
Lectures: R. Marin (UJI)			
<p>Objectives: The goal of the course is to enable students to understand the Ambient Intelligence computing paradigm, which envisions a world where people (and possibly robots) are surrounded by intelligent sensors/actuators and interfaces embedded in the everyday objects around them.</p> <p>Contents: The following subjects will be discussed:</p> <p>Middleware Infrastructures for Ambient Intelligence. Networks of sensors and actuators. Robots within Smart Environments. User/Situation Modelling and Context Awareness. Human-centred adaptive interfaces, Augmented Reality and wearable computing. Applications: from Smart Dust to Smart Cities.</p>			
<p>Abilities: After completing this course the students will be able to</p> <ol style="list-style-type: none"> 1.Understand and discuss the most relevant articles in related areas: smart environments, smart networked objects, augmented + mixed realities, ubiquitous computing & communication, sensor and actuator networks, pervasive computing, tangible computing, intelligent interfaces and wearable computing. 2.Come up with new ideas, start innovative projects in this area. 3.Address the socio-cultural impact (to a lesser extent). 			
Assessment: 20% continuous assessment, 80% from end of semester examination.			
Practical Work: Laboratory exercises with the KnowHouse simulator.			
<p>Recommended texts: <i>Handbook of Ambient Intelligence and Smart Environments (AISE)</i>, Ed. by H. Nakashima, H. Aghajan and J.C. Augusto (Eds.), Springer, to be printed in 2009.</p> <p><i>Ambient Intelligence</i>, Ed. by G. Riva, F. Vatalaro, F. Davide and, M. Alcañiz, Vol. 6., IOS Press Emerging Communication series, January 2005, 316 pp.</p>			
<p>Further readings: will be provided during the course</p>			

