

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

# Basics of VR/AR human-computer interaction

2526-127R-1

#### **Title**

BASICS OF VR/AR HUMAN-COMPUTER INTERACTIONS

#### Teacher(s)

Alberto Gallace, Daniela Briola

#### Language

**English** 

#### **Short description**

The course is devoted to the cognitive aspects of human interaction with VR (and partially of AR technologies), as well as to the underlying design and development processes of VR/AR application, in particular using Unity 3D. Fundamental aspects of approaching a research project with virtual reality technologies will be addressed. The lessons will cover some basic aspects of the Unity 3D graphics tool to introduce the skills and software language needed to develop virtual worlds and to interact with them, focusing on those aspects that can impact the experience of the user: students will learn how to customize a virtual world so that to arouse a particular emotion, or to improve the sense of presence and the general realism of the scene.

Examples of studies applying these technologies will be examined, covering not only the results and motivation of

the studies but also the logic behind specific design and implementation choices, as well as the cognitive, neuroscientific, and psychological aspects of user's responses. The course foresees a theoretical part and a practical one on Unity 3D

#### **CFU / Hours**

1 CFU/8 Hours

## **Teaching period**

See the calendar

## **Sustainable Development Goals**

**QUALITY EDUCATION**