

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

SYLLABUS DEL CORSO

Robotica ed Informatica in Riabilitazione

2021-2-I0201D136-I0201D132M

Aims			

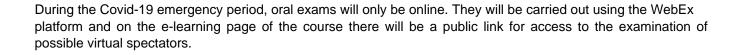
- know and understand the use of new available technologies for rehabilitation

Contents

Detailed program

- robotics in phyiscal therapy: principles and rationale
- systems for data collection and data analysis
- robotic deveices (upper and lower limb)
- virtual reality

- efficacy and limitation of the robotic rehabilitation
Prerequisites
Teaching form
during the Covid-19 emergency period, lessons will take place remotely asynchronously with synchronous videoconferencing events
Textbook and teaching resource
Swinnen E, Beckwée D, Meeusen R, Baeyens JP, Kerckhofs E. Does robot-assisted gait rehabilitation improve balance in stroke patients? A systematic review. Top Stroke Rehabil. 2014 Mar-Apr;21(2):87-100
Krebs HI, Hogan N. Robotic therapy: the tipping point. Am J Phys Med Rehabil. 2012 Nov;91(11 Suppl 3):S290-7
Krebs HI. Robotic technology and physical medicine and rehabilitation. Eur J Phys Rehabil Med. 2012 Jun;48(2):319-2
Lewis GN, Rosie JA. Virtual reality games for movement rehabilitation in neurological conditions: how do we meet the needs and expectations of the users? Disability and Rehabil.
2012 ;34(22):1880-6.
Semester
1st semester
Assessment method



Office hours

By appointment