UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Assessment and Recovery of Spinal Cord Lesion

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

During the Covid-19 emergency period, oral exams will only be online. They will be carried out using the WebEx platform and on the e-learning page of the course there will be a public link for access to the examination of possible virtual spectators.

Office hours

By appointment