SYLLABUS DEL CORSO

Robotica ed Informatica in Riabilitazione

2122-2-I0201D136-I0201D132M
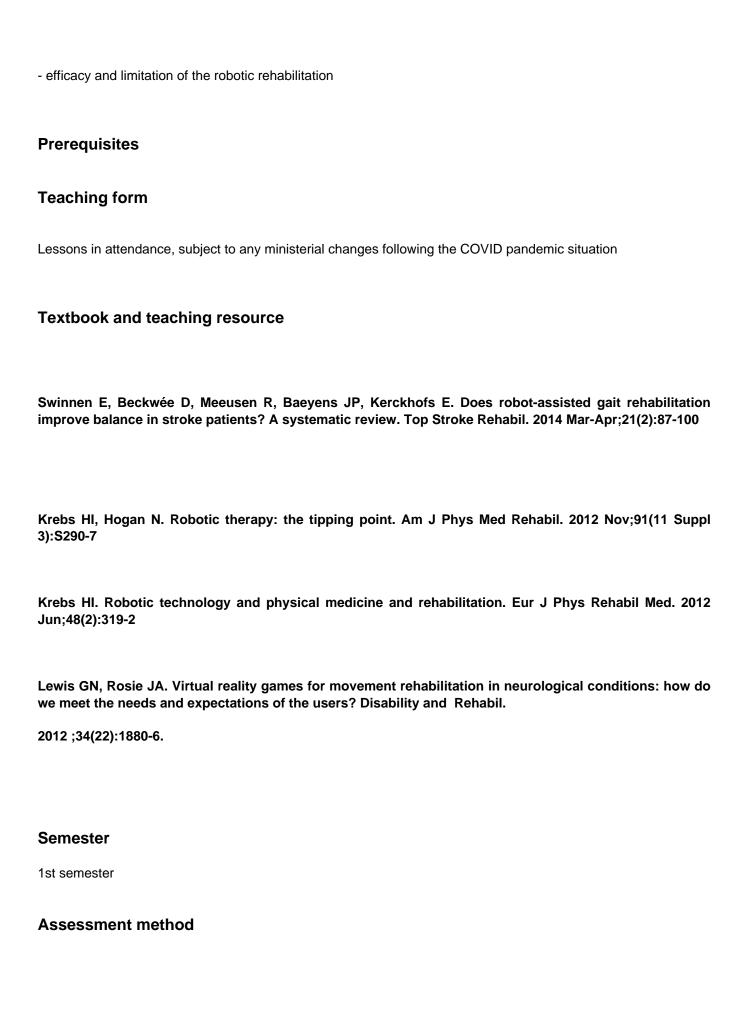

Aims

- 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

Lessons in attendance, subject to any ministerial changes following the COVID pandemic situation

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

Exam in attendance, subject to any ministerial changes following the COVID pandemic situation

Office hours

By appointment