UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Assessment of The Movement System Impairments

2122-2-I0201D137-I0201D209M

Aims

modification mechanism of the motor system components , factors of strength improvement, assess the path of least resistance and the relative stiffness, assessment of the movement impairments, and their related symptoms and contributing factors.

General principles on the functional assessment and clinical assessment.

Contents

Detailed program

- review of the pertinent muscular biology

- muscular hypertrophy

- neural and muscular factors in alignment an d strength

- normal muscles

- atrophy of the muscle

- mechanism of the modification of the components

- muscular strain - length associated changes

- sarcomere engagement - adding more sarcomere in series

– active movement

- alignment correction

- assessment of muscular performance

- stretching programs

- muscular adaptations

- dissociated changes in synergic muscles

- alignment of the lower limbs in the sitting posture

- dissociated changes in muscle length

- muscular stiffness

- relative stiffness/flexibility

- path of least resistance

Prerequisites

Teaching form

during the Covid-19 emergency period, the lessons will take place in a mixed mode: partial presence (Lectures and lab) and asynchronous / synchronous videotaped lessons

Textbook and teaching resource

- Valutazione e trattamento delle Sindromi da Disfunzioni del Movimento Shirley Sahrmann ISBN 880207080-6 Pagine 480 Copertina Cartonata Editore: UTET Anno di edizione: 2005 Skeletal Muscle Structure, Function, and Plasticity Richard L Lieber Lippincott Williams & Wilkins (Sep 2009) Edition: Third ISBN-10: 0-7817-7593-0 ISBN-13: 978-0-7817-7593-9 Pub Date: September 2009 Pages: 336

Semester

1nd semester

Assessment method

written exam with multiple questions

practical examination in presence (if the anti Covid19 rules allow it)

Office hours

By appointment