UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Introduction To Kinesiology 2

2425-1-I0201D129-I0201D108M

Aims

- know the basic principles of kinesiology
- know the basic principles of muscle kinesiology
- know the movement system and its components
- know the rudiments of the clinical implications of muscular component dysfunctions

Contents

Detailed program

When and how to use it?

- The movement system and its components
- Dysfunctions of the muscular component: Weakness Changes associated with length Increased-reduced length
- Dissociated changes in synergists Muscle stiffness
- Muscle physiology Muscle structure: an overview, from macroscopic to microscopic
- The physiology of contraction: outline of the three types of muscle fibres: Type 1 - Type 2 - type 2b
- Muscle recruitment Central and peripheral fatigue The motor unit
- Classification of muscles Local/global stabilizers global mobilizers
- Types of contraction: isometric-isotonic-concentric-eccentricisokinetic-auxotonic-plyometric
- Definition of muscular work, power, resistance. Muscle tone/trophism
- Clinical implications of muscle component dysfunctions
- Strength and stretching: between myths and reality
- Abdominal and clichés

Prerequisites

Basic concepts of Kinesiology

Teaching form

Frontal teaching

Textbook and teaching resource

handouts

Semester

1st semester

Assessment method

Test: multiple choice, open-ended questions. Weighted number of questions compared to those of the other integrated teaching modules

Office hours

By appointment

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY