



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Special Kinesiology

2425-1-I0201D129-I0201D107M

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#### Aims

At the end of the course, students will know the correct terminology for the biomechanical description of human movement, and will be able to distinguish the different possible interactions amongst joint heads. In addition, students will be able to apply basic principles of biomechanics to formally describe human movement.

#### Contents

Introduction to the analysis of human movement through the principles of mechanics (position, velocity, acceleration, force, and torque). Introduction to the kinematic and kinetic of human movement. Introduction to the biomechanical structures involved in movement.

#### Detailed program

Kinematics and osteokinematics  
Joint kinematics  
Principles of biomechanics  
Kinesiology terminology

#### Prerequisites

Principi di anatomia

## **Teaching form**

Standard teaching in presence: topics are discussed by the teacher in the classroom

Integrated teaching in presence: students will perform exercises and presentations to deepen the topics proposed by the teacher.

## **Textbook and teaching resource**

Handouts

Kinesiology of the Musculoskeletal System Foundations for Rehabilitation di: Donald A. Neumann Editore: Mosby Edizione: 3 Data pubblicazione: 2016

I muscoli Funzioni e test con postura e dolore di: E. Kendall McCreary, F. Kendall Editore: Verduci Edizione: 5 Data pubblicazione: 2005

## **Semester**

First semester

## **Assessment method**

According to the course's syllabus (Multiple choice questions, open questions)

## **Office hours**

By appointment

## **Sustainable Development Goals**

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

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