

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# SYLLABUS DEL CORSO

# **Anatomia dell'Apparato Locomotore**

2425-1-I0202D134-I0202D101M

#### **Aims**

Knowledge of the principal components of the skeleton, muscular system, joints and ligaments will be required.

# **Contents**

The course will provide the anatomical basis to understand the functional organization of the locomotor system

## **Detailed program**

- Classification and macroscopic characteristics of bones, muscles, tendons, fascias, sheaths.
  Characteristics and classification of joints (synathrosis and diarthrosis). Movement terminology. Motor unit and neuromuscular spindle
- Growth of bones and modification of muscle masses in the various stages of life and factors that determine them.
- Head: general architecture, neurocranium and splanchnocranium, joints, muscle groups and their functions, cranial fossae, paranasal sinuses, fontanelles, orbital cavity and nasal cavity.
- Vertebral column : general architecture, different types of vertebrae. Joints, intervertebral disc, muscle groups and their functions, ligaments.
- Rib cage: sternum, ribs, joints, muscles.
- Shoulder girdle: general architecture, clavicle and scapula. Joints, ligaments, muscle groups and their functions. Rotator cuff
- Neck. Movements of the head, neck, trunk.
- Upper limb: general architecture, humerus, radius, ulna, carpus, metacarpus, phalanges. Joints, ligaments, muscle groups and their functions.

- Abdominal wall: general architecture, muscle groups, inguinal ligament, inguinal tract.
- Pelvic girdle: general architecture, hip. Joints, ligaments, muscle groups and their actions.
- Lower limb: general architecture, femur, patella, tibia, fibula, tarsus, metatarsus, phalanges. Joints, ligaments, muscle groups and their actions.

# **Prerequisites**

College-level scientific knowledge

# **Teaching form**

Lessons in presence

# Textbook and teaching resource

- Rezzani et al. Anatomia Funzionale dell'Apparato Locomotore. Ed Piccin
- Schunke. Topografia e Funzione dell'Apparato Locomotore. EdiSES
- Soames e Palastanga. Anatomia Umana e Movimento. Ed Edra
- Barni et al. Anatomia dell'Apparato Locomotore. EdiSES
- Hochschild. Spparato Locomotore. Anatomia e Funzioni (due volumi). Edi-Ermes
- Gilroy et al, Prometheus. Atlante di anatomia. EdiSES

#### **Semester**

1st term

#### Assessment method

Described in the subject's syllabus

#### Office hours

Mon-Fri by appointment by mail

#### **Sustainable Development Goals**