



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Anatomy of The Locomotor System

2526-1-I0201D129-I0201D106M

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#### 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 (synarthrosis 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**

Scientific knowledge at high school level

## **Teaching form**

Frontal teaching (in attendance)

## **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

For the texts, the latest edition available.

Teacher will provide other educational material

## **Semester**

First semester

## **Assessment method**

CLOSED ANSWER questions (True/False, Correspondences with silent anatomical images, Multiple choice, etc.) in which knowledge relating to the anatomy of the musculoskeletal system is assessed.

For this ANATOMY module, 10 questions are asked

The score for each question is worth 1 point. The score is then weighted with respect to the course questions, weighted by credit weight.

The total time for the teaching examination is 2 hours and 20 minutes

## **Office hours**

Appointment by prior arrangement by email

## **Sustainable Development Goals**

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

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