UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Anatomy of The Locomotor System

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