UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Biochemistry 2

2324-1-I0201D127-I0201D102M

Aims

By the end of the course, the students will acquire the skills necessary to understand the physiological aspects of the movement. The course aims at developing the students' understanding of basic mechanisms regulating the molecular organization, biochemical reactions, morphology, cellular and subcellular and metabolic pathways that guide the operation and the anatomy of the osteoarticular system. Moreover, this course will provide key concepts of neuroanatomy and movement neurophysiology that will help in the knowledge of the systems that control the movement.

Contents

Biochemistry of muscle and connective tissue. Bioenergetic of muscle contraction; caloric value, equivalent caloric. Different esoergonic systems in the physical exercise (aerobic and anaerobic physical activity).

Detailed program

Biochemistry of muscle and connective tissues.
Bioenergetic of muscle contraction. Collagene and extracellular matrix.
Bioenergetics of nervous system.
Nutrition.

Prerequisites

Biology and Chemistry

Teaching form

Frontal lectures in attendance.

Textbook and teaching resource

Di Giulio A., etc...Biochimica per le scienze motorie. Casa ed Ambrosiana
Bertoli, Colombo, Magni, Marin Palestini Chimica e Biochimica Edises anche in e-book
MacLaren and Morton - Biochimica metabolica dello sport e dell'esercizio fisico edi-ermes 2020 anche in e-book
Siliprandi Tettamanti Biochimica Medica V Ed Piccin

Semester

1st year, I semester

Assessment method

Written exam- 15/20 questions (multiple choice; true/false).

Office hours

on appointment

Sustainable Development Goals

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