UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Physiology

2223-1-I0303D003-I0303D012M

Aims

The student will learn to know and describe the functional mechanism of the integrated biological processes in conditions of normality and the fundamental tools for the pathologic alteration comprehension

Contents

The course provides students with the fundamental theoretical knowledge of physiology, with a view to their subsequent professional application. The following concepts will be examined: the functional mechanisms of the biological phenomenon integrated in normal conditions and the basic tools to interpret pathological changes.

Detailed program

Physiology of the cardiocirculatory system: viscosity and density of the blood; the heart; ventricular pressure-volume relation; conduction system; electrocardiogram; arterial blood pressure and its determinants; blood pressure measurement. Respiratory physiology: oxygen transport-utilization system; transport of O2 and CO2 in the blood; principles of mechanics. Acid-base balance. Maintenance of water-salt balance: Homeostasis and internal environment. Renal physiology. Digestive system physiology. Nervous system physiology. Muscle physiology. Principles of sport physiology.

Prerequisites

Teaching form

Lectures and exercises

Textbook and teaching resource

VV.AA.: Fisiologia dell’uomo. Edizioni Edi.Ermes, Milano.

Guyton A.C.: Elementi di fisiologia umana. Piccin Editore.

Teacher will provide other educational material.

Semester

First Semester

Assessment method

Multiple choice final test comprising 30 questions with only one correct answer among 2, 3, 4 or 5, aimed at evaluating global comprehension of course program. Each correct answer is scored 1.
At the discretion of the professor, the oral examination will be held.

Office hours

By appointment required by mail

Sustainable Development Goals

GOOD HEALTH AND WELL-BEING