



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Physiology

2021-1-I0302D003-I0302D012M

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#### 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

Oxygen transfer from air to mitochondria. Respiratory transfer, cardiovascular transfer. Maintenance of water-salt balance: homeostasis and internal environment. Renal functionality. Nutrition and Energy: Gastrointestinal functionality; energetic metabolism of the integrated system; Hormonal control and mechanisms of action, hormonal systems; Integration of endocrine functionality, neuroendocrine- immunological aspects; movement, information and integration: signals in nervous system; sensory processes; simple and complex reflexes; Memory, learning, behaviour, language and emotions

#### Prerequisites

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## **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 test in itinere 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. Oral examination on request

## **Office hours**

By appointment required by mail

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