



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Medical Physics

2122-1-I0102D004-I0102D013M

---

#### Aims

The general aims of the course are to provide students with basic knowledge of Physics and Medical Physics, necessary to carry out their profession.

#### Contents

The course aims to provide the basic principles of biophysics and medical physics needed to understand the biophysical mechanisms underlying the most relevant physiological processes.

#### Detailed program

Static and dynamics of fluids as applied to the circulatory and fetoplacental systems: equilibrium of fluid, continuity, Bernoulli theorem, viscosity, tension and Laplace formula

---

Physiology of exchanges between the respiratory system and placenta\_\_\_\_\_

---

## **Prerequisites**

Basic knowledge of Mathematics.

## **Teaching form**

Lectures and workshops online and in presence, use of e-learning platform for additional readings and forum discussion.

## **Textbook and teaching resource**

Scannicchio D. Giroletti E. (2015) Elementi di Fisica Biomedica, Edises, Milano.

## **Semester**

1st Year, 2nd Semester

## **Assessment method**

Written exam: test with multiple choice and/or open ended questions.

## **Office hours**

On appointment (by email).

---