UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Interaction Between Medicine and Biomedical Engineering in Diagnosis and Therapy

2122-3-H4101D319

Aims

The meaning of this course is to sensitize the attention of future doctors to scientific and technological innovation, this responds to the fundamental criterion that the development of knowledge and the improvement of medical practice is inextricably linked to the training of young doctors

Contents

Presentation of selected topics to illustrate the importance of the contribution of biomedical engineering in the clinical context. Through the interdisciplinary collaboration between medical engineers and biologists (physiology), the methodologies and technologies of Biomedical Engineering it is possible to describe, understand and, to a large extent, solve the problems of medical-biological interest. Providing usable tools in diagnostics and therapy.

Detailed program

1) ECG

2) MEDICINE IMAGING

3) 3D RECONSTRUCTION (scanner - bioprinters)

4) BIOSENSORS

5) NEW FRONTIERS.

Prerequisites

The course is intended for students at the third year of the Master course

Teaching form

Lessons will be provided in presence, subject to any ministerial changes following the COVID pandemic situation

Textbook and teaching resource

Introduzione all’ingegneria biomedica (E. Biondi, 1997)

Semester

Second semester, March

Assessment method

Self assessment test

Office hours

By appointment, arranged by e-mail