

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **SYLLABUS DEL CORSO**

# **Emergency**

2324-4-H4102D024-H4102D087M

# **Aims**

Provide concepts necessary for understanding pathophysiology, clinical presentation and treatment of the principal cardio - respiratory emergencies.

The course will focus on pathophysiology, clinical symptoms and signs of principal cardio -respiratory emergencies and principles of pharmacological and mechanical treatments.

# **Contents**

The course will explain the most important clinical aspects and relative treatments of the following cardiac and respiratory emergencies:

- 1) Cardiocirculatory arrest
- 2) Cardiogenic Shock
- 3) Cardiac Tamponade
- 4) Acute Aortic Dissection
- 5) Pulmonary Embolism
- 6) Acute Respiratory Insufficiency

# **Detailed program**

- 1) Causes of Cardiocirculatory arrest and treatment (BLS-D, ACLS, ECLS);
- 2) Definition and classification of Shocks' types and focus on Cardiogenic Shock, pathophysiology, clinical presentation and treatment;
- 3) Obstructive shock: focus on the causes of Cardiac Tamponade, pathophysiology, clinical presentation and treatment:
- 4) Causes of Aortic dissection, classification, clinical presentation and medical treatment prior to surgery;
- 5) Causes of Pulmonary Embolism, acute cor pulmonale, pathophysiology, clinical presentation and treatment;
- 6) Causes of Acute Respiratory Insufficiency, clinical presentation and principles of treatment

# **Prerequisites**

Basic knowledge of biology, biochemistry, cardiac, vascular and respiratory anatomy, cardiac and respiratory physiology and pathophysiology.

# **Teaching form**

Frontal lessons in HPG23, with a theoretical and practical approach to the principal cardiorespiratory emergencies fronted in the program.

# Textbook and teaching resource

Lessons' Powerpoint

#### Textbook:

- Harrison's Principle of Internal Medicine
- Braunwald's Heart Disease
- Marino The ICU Book
- Reviews and Articles on principal topics from Pubmed

### **Semester**

First semester.

#### **Assessment method**

The Students' Assessment is divided in two parts.

A first part is composed of a written exam (in presence at HPG23) on the platform esamionline elearning: 50 questions with 5 multiple-choice for each and only one correct. Sufficiency for the access to Oral part: 30/50.

A second part: Oral with discussion of clinical cases on topics of the vertical track.

For the Oral part, The examination commission is composed with a rotation of all Physicians and Professors involved in the Vertical Track.

#### Office hours

on appointment by email

# **Sustainable Development Goals**

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