



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Diagnostics

2425-4-H4102D024-H4102D083M

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#### Aims

The course will provide the essential theoretical knowledge of the key diagnostic tests used for the clinical identification and management of cardiovascular diseases. The acquired knowledge will contribute to a better understanding of the major indications and clinical value of each diagnostic tool. The students will also learn how to interpret basic findings of test results and cardiovascular reports.

#### Contents

Clinical cardiovascular exam; electrocardiogram; chest X-ray; echocardiographic techniques; cardiac computed tomography; cardiac magnetic resonance; scintigraphy; positron emission tomography; invasive hemodynamics; electrophysiology study; cardiac angiography and intracoronary imaging

#### Detailed program

- Cardiovascular examination
- Electrocardiography
- Cardiopulmonary exercise testing and pulmonary function tests
- Noninvasive imaging modalities: overview and selection
- Transthoracic echocardiography and lung ultrasound

- Stress and transesophageal echocardiography
- Cardiac radiography and computed tomography
- Cardiac magnetic resonance
- Nuclear imaging and positron emission tomography
- Invasive imaging and hemodynamics

## **Prerequisites**

- Basic cardiovascular anatomy and physiology, cardiovascular and respiratory pathology and diagnostics
- English language

## **Teaching form**

5 front lessons of 2 hours in attendance

## **Textbook and teaching resource**

- Harrison's Principles of Internal Medicine 20<sup>th</sup> Edition 2018, McGraw-Hill
- Hurst's The Heart 14<sup>th</sup> Edition 2017, McGraw-Hill

## **Semester**

- First semester

## **Assessment method**

Oral examination: discussion on topics covered during the lectures or clinical case analysis

## **Office hours**

By email appointment at [sandro.sironi@unimib.it](mailto:sandro.sironi@unimib.it)

**Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING

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