

## COURSE SYLLABUS

### Diagnostics

2021-4-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**

- During COVID-19 emergency period, the lectures (including theoretical concepts, examples of diagnostic images/reports and clinical case presentations) will be held remotely by asynchronous online videoconference (recorded video lectures available on demand)
- All course activities will be held in English language

## **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**

(1) **Written exam** with multiple choice quiz comprising 30 questions with only one correct answer (among 5) aimed at evaluating global comprehension of course program. Each correct answer is scored 1. A *minimum score of 18* is required for being admitted to oral examination

(2) **Oral examination** (discussion on topics covered during the lectures or clinical case analysis)

During the Covid-19 emergency only telematic oral exams will be available. They will be carried out using the WebEx platform. For access to the events, the links will be published in the e-learning page of the subject

All assessments will be done in English language

## Office hours

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

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