UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Diagnostics

2122-4-H4102D024-H4102D083M

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 pf Internal Medicine 20th Edition 2018, McGraw-Hill

- Hurst's The Heart 14th 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