UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Cardiology

2526-4-H4102D024-H4102D084M

Aims

The course will provide essential and up-to-date theoretical knowledge of the clinical diagnosis and management of a wide spectrum of cardiovascular diseases. The course presents the field of cardiology in a concise and practical manner, addressing the learning needs of medical students. The acquired knowledge will contribute to a better understanding of the causes, diagnosis, and treatment options of cardiac pathologies. Gender differences in epidemiology, clinical presentation, and prognosis will be also addressed.

Contents

Cardiac arrhythmias and conduction disturbances; arterial hypertension and other cardiovascular risk factors; aorta and peripheral vascular disease; valvular heart disease; acute and chronic ischemic heart disease; diseases of myocardium, pericardium, and pulmonary circulation; heart failure with reduced and preserved ejection fraction; interventional cardiology; adaptation of the cardiovascular system to physiologic conditions; basics of pediatric cardiology and congenital heart diseases

Detailed program

- Arrhythmias (tachyarrhythmias I/ bradyarrhythmias II)
- Syncope
- Hypertension
- Aortic syndromes
- Valvular heart disease (I/II)
- Infective endocarditis
- Myocarditis

- Chronic ischemic heart disease
- Acute coronary syndromes (I/II)
- Interventional cardiology
- Cardiomyopathies (I/II)
- Heart failure (I/II)
- Pericardial diseases
- Pulmonary embolism
- Pulmonary hypertension
- Right ventricular failure and cor pulmonale
- Adult congenital heart diseases
- Cardiac tumors
- Adaptation of the cardiovascular system to various physiologic conditions (aging, exercise, pregnancy, high altitude)

Prerequisites

- Basic cardiovascular pathology and diagnostics, fundamentals of human genetics, physiology, and pharmacology of cardiovascular system - English language

Teaching form

The course comprises 30 one-hour lessons taught in person. All course activities will be held in English language except those involving real patients that will be delivered in Italian

Textbook and teaching resource

- Lilly LS. Pathophysiology of Heart Disease. 6th Edition. 2016 Wolter Kluwer
- Harrison’s Principles of Internal Medicine 20th Edition 2018, McGraw-Hill
- Hurst’s The Heart 14th Edition 2017, McGraw-Hill
- The slides and the recorded lessons are available on the e-learning page of the subject

Semester

First semester

Assessment method

(1) **Written exam** with multiple choice quiz comprising 50 questions with only one correct answer (among 4) aimed at evaluating global comprehension of the course program. Each correct answer is scored 1. A minimum score of 30 correct answers is required for being admitted to oral examination

(2) **Oral examination** (starting from a real clinical case we will discuss on topics covered during the lectures or clinical case analysis)

In case of a new 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 on the e-learning page of the subject

All assessments will be done in the English language

Office hours

By email appointment at luigi.badano@unimib.it

Sustainable Development Goals

QUALITY EDUCATION | GENDER EQUALITY