



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Cardiology

2021-4-H4102D024-H4102D084M

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#### Aims

The course will provide the 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 cardiovascular system to physiologic conditions

#### Detailed program

- Arrhythmias (tachyarrhythmias I/ bradiarrhythmias II)
- Syncope
- Hypertension

- Dyslipidemias
- Metabolic syndrome and diabetes
- Aorta, cerebrovascular and peripheral vascular disease (I/II)
- Valvular heart disease (I/II)
- Infective endocarditis
- Myocarditis
- Coronary artery disease
- Acute coronary syndromes (I/II)
- Interventional cardiology
- Heritable channelopathies and cardiomyopathies
- Cardiomyopathies (I/II)
- Heart failure (I/II)
- Risk stratification and cardiac rehabilitation
- Pericardial diseases
- Pulmonary embolism
- Pulmonary hypertension
- Right ventricular failure and cor pulmonale
- Adult congenital heart diseases
- Cardiac tumors
- Sleep disorders and heart disease
- Adaptation of 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**

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- All course activities will be held in English language

## **Textbook and teaching resource**

- Lilly LS. Pathophysiology of Heart Disease. 6th Edition. 2016 Wolter Kluwer
- 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 [luigi.badano@unimib.it](mailto:luigi.badano@unimib.it)

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