



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Cardiological Rehabilitation

2425-2-I0201D138-I0201D215M

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#### Aims

The course aims to provide the tools and knowledge for a correct management of the cardiac patient. The aim is to make available to participants not only notions and theoretical concepts in step with scientific evidence and current guidelines, but also practical tools that can be used immediately in their daily work. At the end of the course the student must be able to:

- Know and know how to use the most suitable functional evaluation scales as stratification tools and outcome measures
- Know the characteristics of aerobic training, strength and the subjective perception scales of effort
- Knowing how to efficiently monitor the heart patient, recognize and know how to move in case of adverse signs and symptoms
- Set up and administer physical training at different degrees of intensity according to targets defined by the guidelines and functional needs
- Knowing how to identify and at least theoretically treat elderly, frail and chronic cardiac patients

#### Contents

Structured therapeutic exercise (physical training) is a core component of Cardiac Rehabilitation (CR). Active lifestyle and aerobic training are in fact closely related to the reduction of the risk of fatal and non-fatal coronary events in healthy people (primary prevention), in subjects with coronary risk factors and in the population of cardiac patients (secondary prevention) of all age groups. Conversely, a sedentary lifestyle is one of the main risk factors for cardiovascular disease (CVD). The physiotherapist who will work with cardiac patients will face ever-changing challenges not only thanks to pharmacological and surgical innovations but also due to the age of the

population that refers to CR. It is therefore essential that this professional figure is constantly updated, that she/he is able to compare himself with the existing guidelines and that he deepens his knowledge through the search for more suitable tools for an increasingly diversified population of cardiac patients.

## **Detailed program**

1. functional evaluation and stratification
2. monitoring of cardiac patient
3. physical training / exercise / aerobic and strength training / re-adaptation to effort
4. emergencies during physical training
5. definition, evaluation and treatment of fragile cardiac patient
6. definition, evaluation and treatment of chronic cardiac patient
7. maintenance of benefits / eHealth

## **Prerequisites**

Concepts of Cardiorespiratory Physiology

## **Teaching form**

Lessons in attendance.

## **Textbook and teaching resource**

- Consensus document and recommendations for cardiovascular prevention in Italy 2018
- Secondary prevention through comprehensive cardiovascular rehabilitation: From knowledge to implementation. 2020 update. A position paper from the Secondary Prevention and Rehabilitation Section of the European Association of Preventive Cardiology
- 2020 ESC Guidelines on sports cardiology and exercise in patients with cardiovascular disease
- Aerobic exercise intensity assessment and prescription in cardiac rehabilitation: a joint position statement of the European Association for Cardiovascular Prevention and Rehabilitation, the American Association of Cardiovascular and Pulmonary Rehabilitation and the Canadian Association of Cardiac Rehabilitation. Mezzani A et al Eur J Prev Cardiol. 2013 Jun;20(3):442-67
- Exercise training intensity determination in cardiovascular rehabilitation: Should the guidelines be reconsidered?

## **Semester**

2nd semester

## **Assessment method**

Described in the subject's syllabus

## **Office hours**

By appointment

## **Sustainable Development Goals**

GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | GENDER EQUALITY

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