



Degree Programme in Physiotherapy

Academic Year 2026 / 2027

INTEGRATED COURSE (I.C.): *INTERDISCIPLINARY CLINICAL SCIENCES 2*

NUMBER OF CFU (ECTS credits): 4

SSD (Academic Discipline Code): MEDS-07/A, MEDS-07/B

COORDINATOR OF THE I.C.: Prof. Achille Gaspardone

E-MAIL: achille.gaspardone@unicamillus.org

MODULE 1: RESPIRATORY SYSTEM DISEASES

NUMBER OF CFU (ECTS credits): 2

SSD (Academic Discipline Code): MEDS-07/A

LECTURER: Prof. Luigino Calzetta

e-mail: luigino.calzetta@unicamillus.org

MODULE 2: CARDIOVASCULAR SYSTEM DISEASES

NUMBER OF CFU (ECTS credits): 1

SSD (Academic Discipline Code): MEDS-07/B

LECTURER: Prof. Maddalena Piro

e-mail: maddalena.piro@unicamillus.org

MODULE 3: CARDIOVASCULAR SYSTEM DISEASES

NUMBER OF CFU (ECTS credits): 1

SSD (Academic Discipline Code): MEDS-07/B

LECTURER: Prof. Achille Gaspardone, Prof. Gregory Angelo Sgueglia

e-mail: achille.gaspardone@unicamillus.org

e-mail: gregoryangelo.sgueglia@unicamillus.org

PREREQUISITE COURSES

None required.

PREREQUISITES

Although there is no prerequisite, general notions of the anatomy of the cardiovascular system, metabolism and basic physiology of the heart and general notions of cardiovascular pathology are necessary.

LEARNING OBJECTIVES

The course aims to provide the basic principles of the major diseases of the respiratory and cardiovascular systems, with hints of clinical practice from a care perspective useful to the physical therapist. In addition, in diseases involving surgical treatment, the role of the physical therapist will be explored.

EXPECTED LEARNING OUTCOMES

DD 1: Knowledge and understanding

At the end of this course the student will have to know:

Know the anatomy and the physiopathology of the cardiovascular system

Know the basic principles of cardiovascular semeiology

Know the non-invasive and invasive cardiovascular diagnostic methods

Know the main cardiovascular diseases

Know the basics of cardiovascular therapy

Know the correct diagnostic procedure for pulmonary diseases

Know how to identify the boundary between conservative and surgical treatment.

DD 2: Applying knowledge and understanding

At the end of the course, the student will be able to:

Use the acquired knowledge for the autonomous deepening of aspects related to the specific field to which the student will dedicate himself in the context of the professional activity.

DD3: Making judgements

At the end of the course, the student must know:

carry out general assessments relating to the topics treated.

DD4: Communication skills

At the end of the course, the student must know:

Use specific scientific terminology appropriately.

DD5: Learning skills

The student will have acquired skills and learning methods suitable for deepening and improving their knowledge and skills in the field of rehabilitation sciences, also through consultation of scientific literature.

SYLLABUS

Syllabus MODULE 1: Respiratory System Diseases

The study and clinical-functional evaluation of the respiratory function in its components: mechanics, ventilation, perfusion and diffusion. Respiratory diseases of obstructive, restrictive and hypersecretory nature: asthma, chronic bronchitis, emphysema, COPD, bronchiectasias, cystic fibrosis. Evaluation and

preparation of the patient to undergo cardio-pulmonary surgery. Tobacco smoking and related diseases. Aspects of rehabilitation and mechanical ventilation.

Syllabus MODULE 2: Cardiovascular System Diseases

The basic principles of cardiovascular anatomy and pathophysiology. Cardiovascular semeiology. Non-invasive and invasive cardiovascular diagnostic techniques. Ischemic heart disease. Heart failure. Arrhythmias. The valvulopathies. Cardiomyopathies. Systemic arterial hypertension. Pulmonary embolism. The paradoxical embolism. The basics of cardiovascular rehabilitation. Principles of cardiovascular therapy.

COURSE STRUCTURE

The Teaching is structured in 40 hours of frontal teaching. Attendance is compulsory for at least 75% of the total hours of all the courses of the integrated course.

COURSE GRADE DETERMINATION

The method of verifying the subjects covered by the Integrated Course provides for an oral exam. During the oral exam, the examining commission will evaluate the student's ability to apply the knowledge and will ensure that the skills are adequate to support and solve problems in the respiratory and cardiological fields. The following will also be evaluated: making judgements, communication skills and learning skills.

For the attribution of the final grade, the following criteria will be adopted:

Fail	Significant gaps and/or inaccuracies in knowledge and understanding of the topics; limited analytical and synthesis skills; argumentation absent or frequently incorrect.
18–20	Barely sufficient knowledge and understanding of the topics, with possible imperfections; sufficient analytical, synthesis, and judgement skills.
21–23	Routine knowledge of the topics; correct analytical and synthesis skills with coherent logical argumentation.
24–26	Fair knowledge and understanding of the topics; good analytical and synthesis skills; rigorously expressed argumentation.
27–29	Complete knowledge of the topics; considerable analytical and synthesis skills; good independent judgement.
30–30L	Excellent level of knowledge and understanding. Considerable analytical, synthesis, and independent judgement skills. Original argumentation expressed with full command of specialized terminology.

In accordance with current legislation and with the guidance of the University's inclusion services, students with certified disabilities or specific learning disorders are entitled to the compensatory tools and measures provided for (e.g. additional time, concept maps, equivalent tests). Adaptations of the examination are

agreed between the lecturer, the student and the competent office, without prejudice to the equivalence of the learning outcomes assessed.

OPTIONAL ACTIVITIES

None required.

READING MATERIALS

All the material treated in the lessons (slides, scientific articles, manuscripts, etc.) will be available to students on the institutional website.

Texts MODULE 1: RESPIRATORY SYSTEM DISEASES

West's Pulmonary Pathophysiology, [Lippincott Williams and Wilkins](#), ISBN 9781496339447

Oxford Handbook of Respiratory Medicine

[Stephen J Chapman](#) et al

Texts MODULE 2 and 3: CARDIOVASCULAR SYSTEM DISEASES

Hurst's the heart manual of cardiology

[Valentin Fuster](#), [Robert O'Rourke](#), [Richard Walsh](#)

Manual of Cardiology

[Kanu Chatterjee](#)

Manual of Cardiovascular Medicine

[Brian P. Griffin](#)