

BSc in Physiotherapy

INTEGRATED COURSE TITLE: INTERDISCIPLINARY CLINICAL SCIENCES II

NUMBER OF ECTS CREDITS: 4

SSD: MEDS-07/A, MEDS-07/B

MODULE CONVENOR: Prof. Achille Gaspardone

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MODULE: CARDIOVASCULAR SYSTEM DISEASES

NUMBER OF ECTS CREDITS: 0.5

SSD: MEDS-07/B

PROFESSOR: [ACHILLE GASPARDONE](#) e-mail: achille.gaspardone@unicamillus.org

MODULE: CARDIOVASCULAR SYSTEM DISEASES

NUMBER OF ECTS CREDITS: 0.5

SSD: MEDS-07/B

PROFESSOR: [GREGORY A. SGUEGLIA](#) e-mail: gregory.sgueglia@unicamillus.org

MODULE: CARDIOVASCULAR SYSTEM DISEASES

NUMBER OF ECTS CREDITS: 1

SSD: MEDS-07/B

PROFESSOR: **MADDALENA PIRO** e-mail: maddalena.piro@unicamillus.org

MODULE: RESPIRATORY SYSTEM DISEASES

NUMBER OF ECTS CREDITS: 2

SSD: MEDS-07/A

PROFESSOR: [LUIGI CALZETTA](#) e-mail: luigino.calzetta@unicamillus.org

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.

LEARNING OUTCOMES

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.

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.

Communication skills

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

Use specific scientific terminology appropriately.

Making judgements

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

carry out general assessments relating to the topics treated.

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.

COURSE SYLLABUS

Syllabus 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.

Syllabus 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.

COURSE STRUCTURE

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

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:

Unsuitable: Poor or lacking knowledge and understanding of the topics; limited capacity for analysis and synthesis, frequent generalizations of the required contents; inability to use technical language.

18-20: Just enough knowledge and understanding of topics, with obvious imperfections; just sufficient capacity for analysis, synthesis and independent judgement; poor ability to use technical language.

21-23: Sufficient knowledge and understanding of topics; sufficient capacity for analysis and synthesis with the ability to logically and coherently argue the required contents; sufficient ability to use technical language.

24-26: Fair knowledge and understanding of the topics; discrete capacity for analysis and synthesis with the ability to rigorously argue the required contents; Good ability to use technical language.

27-29: Good knowledge and understanding of required content; good capacity for analysis and synthesis with the ability to rigorously argue the required contents; good ability to use technical language.

30-30L: Excellent level of knowledge and understanding of the requested contents with an excellent capacity for analysis and synthesis with the ability to argue the requested contents in a rigorous, innovative and original way; Excellent ability to use technical language.

SUGGESTED READING MATERIALS

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

RESPIRATORY SYSTEM DISEASES

West's Pulmonary Pathophysiology, Lippincott Williams and Wilkins, ISBN 9781496339447

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

Oxford Handbook of Respiratory Medicine

Stephen J Chapman et al