

Degree Course in Physiotherapy

INTEGRATED COURSE: INTERDISCIPLINARY CLINICAL SCIENCES II

CFU: 4

SSD: MED/10, MED/11

COORDINATOR:

E-MAIL:

MODULE: RESPIRATORY SYSTEM DISEASES

CFU: 2

SSD: MED/10

PROFESSOR: PROF. LUIGI CALZETTA.

e-mail : luigino.calzetta@unicamillus.org

MODULE: CARDIOVASCULAR SYSTEM DISEASES

CFU: 1

SSD: MED/11

PROFESSOR: PROF. ACHILLE GASPARDONE

e-mail : achille.gaspardone@unicamillus.org

PREREQUISITES

RESPIRATORY SYSTEM DISEASES

Although there are no preparatory requirements, basic concepts of anatomy of respiratory system diseases and human physiology are required.

CARDIOVASCULAR SYSTEM DISEASES

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

RESPIRATORY SYSTEM DISEASES

The aim of the course is to provide the basic principles of the main pathologies of the respiratory system with references to clinical practice in a perspective of assistance useful to the physiotherapist. In addition, the role of the physiotherapist will be investigated in pathologies involving surgical treatment.

CARDIOVASCULAR SYSTEM DISEASES

The training objectives are the basic pathophysiology of the cardiovascular system, cardiovascular semeiology, knowledge of the most common cardiovascular diseases, non-invasive diagnostic methods (ECG, echocardiography, radiological and scintigraphy imaging methods) and invasive (cardiac catheterization), treatment of the most common heart diseases (ischemic heart disease, valvulopathies, heart failure, arrhythmias, systemic arterial hypertension, risk factors). These objectives will be achieved through direct and / or indirect lectures and practical courses at the affiliated health facilities.

LEARNING OUTCOMES

RESPIRATORY SYSTEM DISEASES

At the end of the course the student will have to know the correct diagnostic procedure, with the ability to carry out differential diagnosis among the various pathologies, knowing how to identify the boundary between conservative and surgical treatment

CARDIOVASCULAR SYSTEM DISEASES

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

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.

COURSE 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.

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 10 hours of frontal teaching, divided into two 4-hour and one 2 hours lessons based on the academic calendar.

COURSE GRADE DETERMINATION INTEGRATED COURSE

RESPIRATORY SYSTEM DISEASES

The verification of the preparation of the students will take place with an oral exam. During the oral exam, the examining commission will assess the student's ability to apply the knowledge and ensure that the skills are adequate to support and solve problems of an orthopedic nature.

CARDIOVASCULAR SYSTEM DISEASES

Verification of the students' preparation will take place through an oral exam. During the oral exam, the examining commission will assess the student's ability to apply the knowledge and will ensure that the skills are adequate to support and solve cardiological problems. The following will also be assessed: making judgments, communication skills and learning skills.

READING MATERIALS

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

Walk-in appointments will be offered on dedicated Wednesday from 13.00 - 14:00 at the end of the 4 hours lectures, ground floor, Students' Counseling Office.

