



# UNIVERSITÀ DEGLI STUDI DI PALERMO

<b>DEPARTMENT</b>	Biomedicina, Neuroscienze e Diagnostica avanzata		
<b>ACADEMIC YEAR</b>	2022/2023		
<b>BACHELOR'S DEGREE (BSC)</b>	NEUROPHYSIOPATHOLOGY TECHNIQUES		
<b>INTEGRATED COURSE</b>	REPSIRATORY AND CARDIOVASCULAR PATHOLOGY - INTEGRATED COURSE		
<b>CODE</b>	22330		
<b>MODULES</b>	Yes		
<b>NUMBER OF MODULES</b>	2		
<b>SCIENTIFIC SECTOR(S)</b>	MED/10, MED/11		
<b>HEAD PROFESSOR(S)</b>			
<b>OTHER PROFESSOR(S)</b>	NOVO GIUSEPPINA	Professore Associato	Univ. di PALERMO
	PRINCIPE STEFANIA	Ricercatore a tempo determinato	Univ. di PALERMO
<b>CREDITS</b>	4		
<b>PROPAEDEUTICAL SUBJECTS</b>			
<b>MUTUALIZATION</b>			
<b>YEAR</b>	2		
<b>TERM (SEMESTER)</b>	1° semester		
<b>ATTENDANCE</b>	Mandatory		
<b>EVALUATION</b>	Out of 30		
<b>TEACHER OFFICE HOURS</b>	<b>NOVO GIUSEPPINA</b> Monday 11:00 13:00 Il ricevimento verra svolto previo appuntamento in data ed orario da concordare presso il Reparto di Cardiologia. AOUP- Palermo o Cefpas di CL.		

**DOCENTE:**

<b>PREREQUISITES</b>	Knowledge of anatomy and physiology
<b>LEARNING OUTCOMES</b>	<p>The purpose of the integrated course is to encourage:</p> <ul style="list-style-type: none"><li>- knowledge of the topics covered (notions of physiopathology, clinic, diagnosis and therapy as well as topics more specifically related to the field of neurophysiological diagnostics in pathologies cardiovascular and respiratory apparatus);</li><li>-the ability to understand through analytical strategies and the ability to establish connections between different clinical conditions based on the symptom presented by the patient.</li><li>- the ability to apply knowledge and understanding through the discussion of simple cases which are required to propose the diagnostic process and elements of medical and rehabilitative therapy.</li><li>- the ability to provide independent judgments on the disciplinary contents.</li><li>- The ability to convey to the examiner the contents learned through an appropriate language.</li><li>- The ability to learn in a logically and structured way by placing the contents learned within an appropriate clinical context of reference, ability to consult bibliographic material and scientific theses.</li></ul>
<b>ASSESSMENT METHODS</b>	<p>The oral exam will consist of an interview, aimed at ascertaining the possession of the disciplinary skills and knowledge required by the course, the ability to contextualize and expose.</p> <p>The evaluation will be expressed out of thirty.</p> <p>Open-ended questions will be asked to test:</p> <ul style="list-style-type: none"><li>a) the knowledge acquired;</li><li>b) processing skills;</li><li>c) possession of adequate exhibition capacity.</li></ul> <p>A. As regards the verification of the acquired knowledge, it will be required: what are the physiopathological mechanisms underlying the main cardiovascular and respiratory diseases, such as symptoms, such as the main diagnostics, suitable for diagnosis in the context of the specific pathology in question and rudiments of therapy.</p> <p>B. As regards the verification of processing skills, at least one of the following three objectives will be indicated:</p> <ul style="list-style-type: none"><li>b1) provide independent judgments on the disciplinary contents;</li><li>b2) understand the applications or implications of the same within the framework;</li><li>b3) place the disciplinary contents within the professional, technological or socio-cultural context of reference.</li></ul> <p>C. With regard to the verification of the exhibition skills, the candidate must demonstrate language properties appropriate to the professional context of reference.</p> <p>The exam will be passed with a minimum of marks if the student shows knowledge and understanding of the topics at least in general terms and has minimal application skills in order to solve concrete cases; he must also possess expository and argumentative skills such as to allow the transmission of his knowledge to the examiner. Below this threshold, the examination will be insufficient. The more, however, the examiner, with his / her argumentative and expository skills will be able to interact with the examiner, and the more his knowledge and application skills will go into the detail of the discipline being tested, the more the evaluation will be positive.</p>
<b>TEACHING METHODS</b>	Frontal lessons

## MODULE CARDIOVASCULAR SYSTEM DISEASES

*Prof.ssa GIUSEPPINA NOVO*

### SUGGESTED BIBLIOGRAPHY

Rugarli C., Medicina Interna Sistemica.  
S. Dalla Volta. Malattie del cuore e dei vasi.

<b>AMBIT</b>	10351-Scienze interdisciplinari cliniche
<b>INDIVIDUAL STUDY (Hrs)</b>	30
<b>COURSE ACTIVITY (Hrs)</b>	20

### EDUCATIONAL OBJECTIVES OF THE MODULE

To know the basis of pathophysiology, epidemiology, clinical presentation, diagnostic criteria, natural history and treatment of major diseases of the cardiovascular system.

To know the issues related to rehabilitation and treatment of the main diseases of the cardiovascular system.

To know how to apply a therapeutic strategy correctly and efficiently and to know principles of possible therapeutic approaches, as part of the rehabilitation of the main diseases of the cardiovascular system.

The student must also know the basis of the main biochemical and instrumental tests useful for diagnosis and follow-up of individual cardiovascular diseases.

## SYLLABUS

Hrs	Frontal teaching
2	Main symptoms of cardiovascular disease: dyspnea, chest pain, palpitations, syncope
2	Atherosclerosis and cardiovascular risks factors. Prevention of cardiovascular diseases; Invasive and non invasive cardiological diagnostic tests.
2	Acute coronary Syndromes: STEMI, UA/NSTEMI; chronic ischaemic cardiomyopathy
2	Acute and chronic heart failure
2	Cardiomyopathies, myocarditis, infective endocarditis
2	Valves disease
2	Cardiac arrhythmias; Sudden cardiac death and cardiac life support
2	Venous thromboembolism; Peripheral arterial disease
2	Aortic aneurysm
2	Arterial hypertension

## MODULE RESPIRATORY SYSTEM DISEASES

*Prof.ssa STEFANIA PRINCIPE*

### SUGGESTED BIBLIOGRAPHY

- 1) Il ricondizionamento all'esercizio fisico del paziente con patologia respiratoria. Dalla valutazione al trattamento. Lazzeri M., Brivio A., Carlucci A., Piaggi G. 2014  
 2) Medicina Interna per Scienze Infermieristiche. Raffaele Antonelli Incalzi. Piccin 2012

<b>AMBIT</b>	10351-Scienze interdisciplinari cliniche
<b>INDIVIDUAL STUDY (Hrs)</b>	30
<b>COURSE ACTIVITY (Hrs)</b>	20

### EDUCATIONAL OBJECTIVES OF THE MODULE

Knowing the basics of pathophysiology, epidemiology, clinical presentation, diagnostic criteria, natural history and treatment of principal respiratory diseases.

Knowing in detail the issues related to rehabilitation of the main respiratory diseases.

Knowing how to correctly and efficiently perform a rehabilitation and physiotherapy program and to know the general frameworks of possible therapeutic approaches, as part of the rehabilitation of the main respiratory diseases.

The student must also know the basics of main instrumental tests that are useful for diagnosis and follow-up of respiratory diseases.

## SYLLABUS

Hrs	Frontal teaching
2	Main symptoms of respiratory diseases: cough, dyspnea, hemoptysis and chest pain.
2	Chronic obstructive pulmonary disease (COPD): 1) Chronic bronchitis; 2) Pulmonary emphysema; 3) The damages of tobacco smoke. Asthma
2	Inhalation therapy in asthma and COPD: aerosols and portable devices for inhaled drugs.
2	Lung tumours
2	Bronchiectasis: bronchiectasis and cystic fibrosis and non-cystic bronchiectasis.
1	Obstructive sleep apnea syndrome (OSAS).
1	Pneumonia: CAP and HAP
2	Pathophysiology and pulmonary function tests: 1) 6 minute walk test; 2) Dyspnea Scales; 3) Spirometry (baseline and global); 4) reversibility test; 5) Challenge test with methacholine; 6) DLco; Arterial blood gases and SaO <sub>2</sub> .
2	The acute and chronic respiratory failure; Oxygen therapy; The non-invasive mechanical ventilation (NIV).
1	Diffuse pulmonary diseases: 1) Idiopathic pulmonary fibrosis; 2) Sarcoidosis.
1	Pulmonary tuberculosis.
2	Pleural diseases: 1) pleural effusions; 2) pneumothorax; 3) Mesothelioma.