UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata
ACADEMIC YEAR	2018/2019
MASTER'S DEGREE (MSC)	MEDICINE AND SURGERY
INTEGRATED COURSE	SYSTEMATIC PATHOLOGY I - INTEGRATED COURSE
CODE	13246
MODULES	Yes
NUMBER OF MODULES	3
SCIENTIFIC SECTOR(S)	MED/22, MED/11, MED/10
HEAD PROFESSOR(S)	CORRADO EGLE — Professore Associato — Univ. di PALERMO BAJARDI GUIDO — Professore Ordinario — Univ. di PALERMO
OTHER PROFESSOR(S)	CORRADO EGLE — Professore Associato — Univ. di PALERMO GALASSI ALFREDO RUGGERO — Professore Ordinario — Univ. di PALERMO NOVO GIUSEPPINA — Professore Associato — Univ. di PALERMO BONSIGNORE MARIA ROSARIA — Professore Ordinario — Univ. di PALERMO SCICHILONE NICOLA — Professore Ordinario — Univ. di PALERMO BAJARDI GUIDO — Professore Ordinario — Univ. di PALERMO PECORARO FELICE — Professore Ordinario — Univ. di PALERMO BATTAGLIA SALVATORE — Professore Associato — Univ. di PALERMO
CREDITS	10
PROPAEDEUTICAL SUBJECTS	17453 - PATHOPHYSIOLOGY AND MEDICAL METHODOLOGY - INTEGRATED COURSE
MUTUALIZATION	
YEAR	3
TERM (SEMESTER)	2° semester
ATTENDANCE	Mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**BAJARDI GUIDO** Tuesday 09:00 12:00 Direzione Chirurgia Vascolare Thursday 09:00 12:00 Direzione Chirurgia Vascolare **BATTAGLIA SALVATORE** Monday 15:00 17:00 Al Policlinico. Presso Pneumologia nel il plesso di Oculistica, al 1° piano. In alternativa presso il Reparto di degenza in Clinica Medica I. NOTA BENE: a causa dei turni di guardia e' necessario concordare il ricevimento con appuntamento tramite e-mail: salvatore.battaglia@unipa.it. Per lo stesso motivo il ricevimento e' spesso possibile anche in altri giorni della settimana. **BONSIGNORE MARIA ROSARIA** Monday 15:00 17:00 Ospedale Cervello, Edificio B, 2° piano **CORRADO EGLE** Thursday 12:00 14:00 U.O.C di Cardiologia **GALASSI ALFREDO RUGGERO** Tuesday 14:00 15:00 Via del Vespro n 129, AOU Policlnico P. giaccone, Edificio 12 A **NOVO GIUSEPPINA** 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.

	PECORARO FELICE Tuesday 14:00 16:00 **SCICHILONE NICOLA** Monday 13:00 16:00 AOUP Giaccone - UOC di Pneumologia - Padiglione 5 A

DOCENTE: Prof. GUIDO BAJARDI- *Sede CHIRONE, - Sede IPPOCRATE*

PREREQUISITES	1. Macro- and microscopic morphology of the vascular system. 2. Overview of inflammation and atherosclerosis. 3. Physics of the fluids. 4. Physiopathology of the vascular system.
LEARNING OUTCOMES	Knowledge and understanding of vascular diseases: At the end of the Course, students are expected to know: a) the main clinical features of vascular diseases, b) those diseases showing the highest incidence, as indicated in the attached module, and knowledge of their pathophysiology, c) the diagnostic approach to vascular disease, d) knowledge of clinical symptoms and signs and of diagnostic examination of the main vascular diseases, and e) intervention modalities as primary and secondary prevention are concerned. Knowledge and understanding of the main interactions between vascular disease and other disease states. At the end of the Course, students will have acquired the expertise to correctly gather anmnestic information, perform clinical examination of the vascular system, formulate diagnostic hypotheses, and be able to request diagnostic tests while taking into account the cost-to-benefit ratio. Application of knowledge: Ability to recognize the most common vascular diseases and plan specific medical interventions. Ability to provide adequate medical solutions to patients' needs related to vascular diseases. Students should be able to apply the knowledge acquired during the Course in the work context. Judgement: Ability to evaluate the medical implications associated with vascular diseases. Communication skills: Ability to summarize the current state of the vascular problem and its prognostic implications to medical staff, patients and relatives who might ask about it. Learning skills: Ability to update current knowledge in vascular medicine, through consultation of scientific publications of the field.
ASSESSMENT METHODS	Type of assessmet: Oral assessment. This assessment is used to evaluate the student's knowledge and understanding of the programme content, independent judgement, ability to apply acquired knowledge and specific technical terminology. Questions: the student will have to answer to the posed question orally which will focus on the subjects covered in the programme, making reference to suggested texts. Assessment criteria: The assessment grades are given as numerical scores awarded out of a possible 30 points, and as follows: - 30 - 30 cum laude - ECTS grades: Excellent (A – A+) Result: Excellent knowledge of the taught subject matter. The student demonstrates good analytic-synthetic capabilities and is able to apply knowledge to resolve highly complex problems. - 27 – 29 – ECTS grades: Very good (B) Result: Very good knowledge of the taught subject matter and good use of language. The student demonstrates analytic-synthetic capabilities and is able to apply knowledge to resolve some complex problems. - 24 – 26 – ECTS grades: Good (C) Result: Good knowledge of the taught subject matter and good use of language. The student is able to apply knowledge to resolve problems of medium complexity. - 21 – 23 – ECTS grades: Satisfactory (D) Result: Reasonable knowledge of the taught subject matter, in some cases limited to the main topics. Acceptable use of technical language and capacity to apply acquired knowledge independently. - 18 – 20 – ECTS grades: Sufficient (E) Result: Minimal knowledge of the taught subject matter, often limited to the main topics. Modest use of technical language and some capacity to apply acquired knowledge independently. - 1 – 17 – ECTS grades: Fail (F) Result: Unacceptable knowledge of the taught subject matter. Little or no use of technical language and capacity to apply acquired knowledge independently. Exam failed.
TEACHING METHODS	Lectures

DOCENTE: Prof.ssa EGLE CORRADO- *Sede HYPATIA*

PREREQUISITES	1. Macro- and microscopic morphology of the vascular system. 2. Overview of inflammation and atherosclerosis. 3. Physics of the fluids. 4. Physiopathology of the vascular system.
LEARNING OUTCOMES	Knowledge and understanding of vascular diseases: At the end of the Course, students are expected to know: a) the main clinical features of vascular diseases, b) those diseases showing the highest incidence, as indicated in the attached module, and knowledge of their pathophysiology, c) the diagnostic approach to vascular disease, d) knowledge of clinical symptoms and signs and of diagnostic examination of the main vascular diseases, and e) intervention modalities as primary and secondary prevention are concerned. Knowledge and understanding of the main interactions between vascular disease and other disease states. At the end of the Course, students will have acquired the expertise to correctly gather anmnestic information, perform clinical examination of the vascular system, formulate diagnostic hypotheses, and be able to request diagnostic tests while taking into account the cost-to-benefit ratio. Application of knowledge: Ability to recognize the most common vascular diseases and plan specific medical interventions. Ability to provide adequate medical solutions to patients' needs related to vascular diseases. Students should be able to apply the knowledge acquired during the Course in the work context. Judgement: Ability to evaluate the medical implications associated with vascular diseases. Communication skills: Ability to summarize the current state of the vascular problem and its prognostic implications to medical staff, patients and relatives who might ask about it. Learning skills: Ability to update current knowledge in vascular medicine, through consultation of scientific publications of the field.
ASSESSMENT METHODS	Type of assessmet: Oral assessment. This assessment is used to evaluate the student's knowledge and understanding of the programme content, independent judgement, ability to apply acquired knowledge and specific technical terminology. Questions: the student will have to answer to the posed question orally which will focus on the subjects covered in the programme, making reference to suggested texts. Assessment criteria: The assessment grades are given as numerical scores awarded out of a possible 30 points, and as follows: - 30 - 30 cum laude - ECTS grades: Excellent (A – A+) Result: Excellent knowledge of the taught subject matter. The student demonstrates good analytic-synthetic capabilities and is able to apply knowledge to resolve highly complex problems. - 27 – 29 – ECTS grades: Very good (B) Result: Very good knowledge of the taught subject matter and good use of language. The student demonstrates analytic-synthetic capabilities and is able to apply knowledge to resolve some complex problems. - 24 – 26 – ECTS grades: Good (C) Result: Good knowledge of the taught subject matter and good use of language. The student is able to apply knowledge to resolve problems of medium complexity. - 21 – 23 – ECTS grades: Satisfactory (D) Result: Reasonable knowledge of the taught subject matter, in some cases limited to the main topics. Acceptable use of technical language and capacity to apply acquired knowledge independently. - 18 – 20 – ECTS grades: Sufficient (E) Result: Minimal knowledge of the taught subject matter, often limited to the main topics. Modest use of technical language and some capacity to apply acquired knowledge independently. - 1 – 17 – ECTS grades: Fail (F) Result: Unacceptable knowledge of the taught subject matter. Little or no use of technical language and capacity to apply acquired knowledge independently. Exam failed.
TEACHING METHODS	Lectures

MODULE
CARDIOLOGY

Prof. ALFREDO RUGGERO GALASSI - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY	
Rugarli C., Medicina Interna Sistematica. S. Dalla Volta. Malattie del cuore e dei vasi.	
AMBIT	50407-Formazione clinica interdisciplinare e medicina basata sulle evidenze
INDIVIDUAL STUDY (Hrs)	60
COURSE ACTIVITY (Hrs)	40

EDUCATIONAL OBJECTIVES OF THE MODULE

Objective of the module and the description of some epidemiological, pathogenetic, and clinical-prognostic of cardiovascular diseases . Completing the module description and application of the main instrumental diagnostic methods used in practice cardiology and angiology (ECG, echocardiogram, Echocolordoppler , dynamic ECG , exercise stress tests) and the knowledge of the mode of some invasive instrumental techniques (coronary angiography) or emergency (defibrillation).

SYLLABUS

Hrs	Frontal teaching
2	anatomy and physiology of the heart and vascular system. elementary principles of . Notions of hemodynamic.
4	Electrocardiography: basic principles and practical applications.
2	Arrhythmias and their classification. Concept of ECG Holter.
4	ischemic heart disease: definition, epidemiology, risk factors, pathogenesis, classification, pathology factors, clinical, principles of diagnosis and therapy.
2	Deep venous thrombosis and pulmonary embolism
2	Atherosclerosis, risk factor
2	Cardiomyopathies and myocarditis
2	Infective endocarditis
1	Pericardial diseases
2	Valves disease
2	Sudden cardiac death and cardiac life support
2	Arterial hypertension
1	syncope
2	chest pain

MODULE
VASCULAR SURGERY

Prof. FELICE PECORARO - Sede HYPATIA, - Sede HYPATIA

SUGGESTED BIBLIOGRAPHY

-Morfologia & Clinica. Architettura e chirurgia vascolare. Storia medica. Collana 'De Arte Medendi' - “plumelia” Edizioni – Bagheria (PA) ISBN. 978-88-98731-63-3
- Chirurgia Vascolare ed Endovascolare. Eds: G. Regina. 2014 Piccin
-www.unipapress.it - Sezione atti e convegni – Aggiornamenti di Chirurgia Vascolare 2016

AMBIT	50407-Formazione clinica interdisciplinare e medicina basata sulle evidenze
INDIVIDUAL STUDY (Hrs)	30
COURSE ACTIVITY (Hrs)	20

EDUCATIONAL OBJECTIVES OF THE MODULE

Acquisition of technical language, knowledge and competence on the following topics:
- Acute ischemic disease
- Aneurysms
- Cerebrovascular disease
- Aortic dissection / Mesenteric ischemia
- Leriche Syndrome / Sublavian steal syndrome / Popliteal entrapment syndrome
- Peripheral arterial disease
- Varicose disease / Superficial thromboflebitis / Deep Venous Thrombosis
- Vascular injuries / superior outlet syndrome
- Buerger disease/ Nephrovascular hypertension
- Diabetic foot / Lymphatic disease

SYLLABUS

Hrs	Frontal teaching
2	Acute Ischemia
2	Aneurysms
2	Carotids
2	Aortice dissections/mesenteric ischemia
2	leriche syndrome/Subclavian Steal Syndrome/Popliteal artery entrapment syndrome
2	Peripheral arterial disease
2	Vein deiseases
2	Extremities Trauma/Thoracic outlet syndrome
2	Buerger disease/renovascular hypertension
2	Diabetic foot/Lymphatic diseases

MODULE
RESPIRATORY SYSTEM DISEASES

Prof. NICOLA SCICHILONE - Sede IPPOCRATE, - Sede IPPOCRATE

SUGGESTED BIBLIOGRAPHY

PROIEZIONI IN POWER POINT DEL DOCENTE
TESTI CONSIGLIATI. Clini E, Pelaia G (eds). Manuale di Pneumologia. Edizioni Edises 2017
Rugarli C (Ed). Medicina interna sistematica. EDRA Masson 2015
Loizzi M, Oliaro A (Eds). Malattie dell'apparato respiratorio. Pneumologia e chirurgia toracica. Edizioni Minerva Medica 2015.
Bellia V. (Ed). Core Curriculum Malattie respiratorie. Milano: McGraw Hill 2011.

AMBIT	20949-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	60
COURSE ACTIVITY (Hrs)	40

EDUCATIONAL OBJECTIVES OF THE MODULE

Knowledge and understanding of respiratory diseases: At the end of the Course, students are expected to know the main clinical features and pathophysiology of the most prevalent respiratory disease, as indicated in the attached module. Emphashis will be placed on the diagnostic approach to respiratory diseases, including evaluation and undestanding of the physical examination and diagnostic procedures of the main respiratory diseases. Students will learn how to implement primary and secondary prevention modalities and the main interactions between respiratory disease and other disease states. At the end of the Course, students will ba able to correctly gather anamnestic information, perform clinical examination of the respiratory system, formulate diagnostic hypotheses, and set the correct diagnostic workup in terms of cost-to-benefit ratio. Application of knowledge: Ability to recognize the most common respiratory diseases and plan specific medical interventions. Ability to provide adequate medical solutions to patients' needs related to respiratory diseases. Students should be able to apply the knowledge acquired during the Course in the work context. Judgement: Ability to evaluate the medical implications associated with respiratory diseases. Communication skills: Ability to summarize the current state of the respiratory problem and its prognostic implications to medical staff, patients and relatives who might ask about it. Learning skills: Ability to update current knowledge in respiratory medicine, through consultation of scientific publications of the field.

SYLLABUS

Hrs	Frontal teaching
2	Approach to the patient with respiratory problems. Signs and symptoms in pulmonology. Basic knowldedge and interpretation of pulmonary funcion tests. Basic knowldedge and interpretation of the most important questionnaires in pulmonology (Fagenstrom questionnaire; Motivational Mondor test; St. George Respiratory Questionnaire; COPD assessment test; Medical Research Council test for Dyspnoea, etc.).
4	Bronchial asthma. Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Therapy
4	Chronic obstructive pulmonary disease (COPD). Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Medical and surgical therapy
6	Lung tumors. Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Medical and surgical therapy. Supportive care in lung cancer
6	Pleural diseases. Pleural effusions. Pneumothorax. Pleural malignant mesothelioma. Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Medical and surgical therapy. Thoracenthesis. Pleurostomy and related procedures.
4	Community-acquired pneumonias (CAP) and hospital-acquired pneumonias (HAP). Pneumonias in the immuno-compromised host. Lung abscess. Definition, epidemiology, risk factors, pathogenesis, pathology, clinical and instrumental diagnosis, natural history and complications, Therapy and prophylaxis.
2	Bronchiectasis. Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Therapy.
2	Pulmonary tuberculosis. The history of tuberculosis. Definition, epidemiology, risk factors, pathogenesis, pathology, clinical and instrumental diagnosis, natural history and complications, Therapy and prophylaxis. Tuberculosis in immune-deficiencies.
2	Diffuse interstitial lung disorders: classification. Idiopathic pulmonary fibrosis: definition, epidemiology, risk factors, pathogenesis, pathology, clinical and instrumental diagnosis, natural history and complications, Medical and surgical therapy. Lung transplantation.
2	Pulmonary embolism. Defintion, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Therapy and long-term prophylaxis
2	Obstructive sleep apnea syndrome (OSAS) and other sleep-related lung disorders. Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications, Therapy.
4	Acute and chronic respiratory failure. Definition, epidemiology, risk factors, pathophysiology, clinical and instrumental diagnosis, natural history and complications. Oxygen therapy and non invasive mechanical ventilation: basic principles, indications and side effects.

MODULE
RESPIRATORY SYSTEM DISEASES

Prof.ssa MARIA ROSARIA BONSIGNORE - Sede CHIRONE, - Sede CHIRONE

SUGGESTED BIBLIOGRAPHY

Bellia V: Core Curriculum. MacGraw-Hill 2011
Rugarli: Medicina Interna Sistematica, 7° edizione, 2015

AMBIT	20949-Attività formative affini o integrative
INDIVIDUAL STUDY (Hrs)	60
COURSE ACTIVITY (Hrs)	40

EDUCATIONAL OBJECTIVES OF THE MODULE

Knowledge and skills: At the end of the course, students will know the main problems concerning the most common respiratory diseases, indicated in the associated module, their pathophysiology, the diagnostic approach, the symptoms and signs of the most common respiratory diseases, and interventions aimed at primary and secondary prevention. In addition, students will know Basic Life Support maneuvers. Finally, the interaction between respiratory and other diseases will be discussed. At the end of the course, students will be able to collect medical history and symptoms and signs in the respiratory field, formulate a diagnostic hypothesis, and request further diagnostic examinations according to cost/benefit ratios. Application of knowledge and skills: Ability to recognize the most prevalent respiratory diseases and plan specific medical interventions. Ability to provide adequate medical response to the needs of the patients with respiratory disorders. Students will develop skills to apply the knowledge acquired during the course to clinical practice. Judgement: students will be able to evaluate the medical implications associated with respiratory diseases. Communication skills: students will be able to communicate the significance and prognosis of the respiratory condition to medical staff, patients and relatives. Learning skills: ability to update knowledge on respiratory diseases and linked medical sciences by consultation of scientific journals

SYLLABUS

Hrs	Frontal teaching
1	Anatomy and basic physiology of the respiratory system
3	Main symptoms of respiratory disease: cough, dyspnea, emoptysis, chest pain. Main signs of respiratory disease: rales, wheezing, cyanosis, clubbing
2	Methods used in respiratory pathophysiology: spirometry, arterial blood gases, pulse oximetry, walking test, polygraphic monitoring during sleep
3	Chronic obstructive pulmonary disease (COPD): chronic bronchitis, emphysema. Definition, epidemiology, risk factors, pathology, symptoms and signs; natural history, complications, treatment.
3	Bronchial asthma and respiratory allergies. Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Infectious pneumonia: community acquired ((CAP) and hospital-acquired (HAP) penumonia. Pneumonia in the immunocompromised host and aspiration penumonia (ab ingestis). Lung abscess. Main pathogens in CAP and HAP (viruses, bacteria, mycetes). Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Pulmonary tuberculosis. Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Acute and chronic respiratory failure. Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Obstructive sleep apnea syndrome Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Noninvasive mechanical ventilation (NIV): basic knowledge of NIV modalities, circuits and masks. Complications and side effects of NIV. Oxygen therapy in acute and chronic respiratory failure
1	Bronchiectasis: Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Diffuse infiltrative pneumonias: idiopathic pulmonary fibrosis, sarcoidosi Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
1	Pulmonary edema: pathophysiology and clinical aspects.
2	Pulmonary embolism. Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Pleural diseases: pleural effusions, pneumothorax, mesothelioma. Definition, epidemiology, risk factors, pathophysiology, pathology, symptoms and signs, natural history, complications and treatment.
3	Lung cancer. TNM classification; pathology of malignant pulmonary neoplasms. Basic knowledge on treatment of pain, and nurse assistance in lung neoplasms.