

UNIVERSITÀ DEGLI STUDI DI PALERMO

| DEPARTMENT | Biomedicina, Neuroscienze e Diagnostica avanzata |
|-------------------------|---|
| ACADEMIC YEAR | 2023/2024 |
| BACHELOR'S DEGREE (BSC) | BIOMEDICAL LABORATORY TECHNIQUES |
| INTEGRATED COURSE | INTERNAL MEDICINE AND IMAGE DIAGNOSTICS - INTEGRATED COURSE |
| CODE | 15230 |
| MODULES | Yes |
| NUMBER OF MODULES | 2 |
| SCIENTIFIC SECTOR(S) | MED/09, MED/36 |
| HEAD PROFESSOR(S) | PARRINELLO GASPARE Professore Associato Univ. di PALERMO |
| OTHER PROFESSOR(S) | PARRINELLO GASPARE Professore Associato Univ. di PALERMO |
| CREDITS | 6 |
| PROPAEDEUTICAL SUBJECTS | |
| MUTUALIZATION | |
| YEAR | 3 |
| TERM (SEMESTER) | 2° semester |
| ATTENDANCE | Mandatory |
| EVALUATION | Out of 30 |
| TEACHER OFFICE HOURS | PARRINELLO GASPARE |
| | Monday 11:00 13:00 Dibimis |
| | Thursday 11:00 13:00 Dibimis |

DOCENTE: Prof. GASPARE PARRINELLO

| PREREQUISITES | Knowing the human physiology |
|--------------------|---|
| LEARNING OUTCOMES | Knowing and understanding the basic concepts of internal medicine and diagnostic imaging |
| ASSESSMENT METHODS | The sufficiency threshold will be reached if the student shows knowledge and understanding of the issues at least in broad outline, and has application skills sufficient; he must also have presentation and argumentative skills allowing the transmission of his knowledge to the examiner. Below this threshold, the examination will be insufficient. The more the candidate will be able to interact with the examiner with his argumentative and presentation skills, and the more his knowledge and application capabilities will go into detail on the subjects under evaluation, the more the judgement will be positive. The evaluation is expressed using a 30-point scale. ECTS grades: A – A+ Excellent (30-30 cum laude) - Grade descriptors : Excellent knowledge of teaching contents; students should show high analytical and synthetic capabilities and should be able to apply their knowledge to solve highly complex problems. ECTS grade : B Very good (27-29) - Grade descriptors: Good knowledge of the teaching contents and excellent language control; students should show analytical and synthetic skills and be able to apply their knowledge to solve highly complexity. ECTS grade: C Good (24-26)- Grade descriptors: Good knowledge of teaching contents and good language control; the students should be able to apply their knowledge to solve problems of medium complexity ECTS grade: D Satisfactory (21-23)- Grade descriptors: Average knowledge of the teaching content, in some cases limited to the main topic; acceptable ability to use the specific discipline language and independently apply the acquired knowledge. ECTS grade: F Fail (1-17) - Grade descriptors: Lack of an acceptable knowledge of the main teaching content knowledge, exam failed. |
| TEACHING METHODS | Lectures and tutorials |

MODULE IMAGE DIAGNOSTICS AND RADIOTHERAPY

SUGGESTED BIBLIOGRAPHY

| Dispense del docente Cittadini. Diagnostica per immagini e radioterapia. Ediz. illustrata Copertina flessibile – 30 giu 2015 | | |
|---|--|--|
| AMBIT | 10350-Scienze della prevenzione e dei servizi sanitari | |
| INDIVIDUAL STUDY (Hrs) | 45 | |
| COURSE ACTIVITY (Hrs) | 30 | |
| EDUCATIONAL OBJECTIVES OF THE MODULE | | |

Acquire basic knowledge on ionizing and non-ionizing radiation, health problems related to radiation exposure and relative legislative principles that protect workers exposed to radiation-associated risks. Acquire radiation exposure prevention methods. Acquire patient management methods in a radiology or nuclear medicine unit.

| SYLLABUS | | |
|----------|---|--|
| Hrs | Frontal teaching | |
| 8 | Knowledge of fundamentals of physics, characterization of ionizing radiation, health problems related to exposure to ionizing radiation | |
| 2 | Non-ionizing radiation: physical characteristics and application in diagnostic imaging. | |
| 8 | Pinciples of Radiobiology | |
| 2 | Contrast media: classification and characteristics; clinical applications; adverse reactions and related measures. Patient preparation and management. | |
| 8 | Risks related to exposure to radiation and protective devices. Examples and discussion. | |
| 2 | Italian Health legislation with particular regard to the principles of applicability of radiation protection for workers exposed to radiation-related risks. Assessment of risks related to radiation exposure. | |

MODULE **INTERNAL MEDICINE**

Prof. GASPARE PARRINELLO

SUGGESTED BIBLIOGRAPHY

HARRISON. PRINCIPI DI MEDICINA INTERNA,

| Passi scelti indicati dal docente ed eventuale integrazione con materiale didattico fornito dal docente" | | |
|--|----------------------|--|
| AMBIT | 10339-Primo soccorso | |
| INDIVIDUAL STUDY (Hrs) | 45 | |
| COURSE ACTIVITY (Hrs) | 30 | |
| | | |

EDUCATIONAL OBJECTIVES OF THE MODULE

The course aims to give students the knowledge on internal pathologies of interest in the context of the biomedical laboratory. It will be discussed in details the epidemiology, etiology, pathogenesis as well as symptoms, diagnosis, and prognosis of internal pathologies of more frequent observation in the context of biomedical laboratory. approaches

| Hrs | Frontal teaching |
|-----|--|
| 2 | Internal medicine and the clinical method The anamnesis: family and personal; pathological remoteness and near |
| 2 | Arterial hypertension: epidemiology, pathophysiology and diagnosis with particular reference to laboratory parameters useful for defining the primary pathology that causes it |
| 2 | Acute heart attack, acute pulmonary edema: epidemiology, pathophysiology and laboratory diagnosis |
| 4 | Acute anterior chest pain: angina pectoris. epidemiology, pathophysiology and laboratory diagnosis |
| 2 | Congestive heart failure: epidemiology, pathophysiology and laboratory diagnosis |
| 2 | Pulmonary embolism: lipodimia, syncope. The role of laboratory investigations |
| 2 | Endocarditis, pericarditis and myocarditis: epidemiology, pathophysiology and laboratory diagnosis |
| 4 | Nosocomial and community pneumonia: epidemiology, pathophysiology and laboratory diagnosis |
| 2 | Sepsis and septic shock: epidemiology, pathophysiology and laboratory diagnosis |
| 2 | Fever of unknown origin (FUO): epidemiology and laboratory diagnosis |
| 2 | Connectivitis and vasculitis: epidemiology, pathophysiology and laboratory diagnosis |
| 2 | cirrosis: epidemiology, pathophysiology and support for laboratory |
| 2 | Acute and chronic renal failure, Glomerulonephritis and Glomerulonephrosis: epidemiology, pathophysiology and laboratory diagnosis |

SYLLABUS