UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Promozione della Salute, Materno-Infantile, di Medicina Interna e Specialistica di Eccellenza “G. D’Alessandro”
ACADEMIC YEAR	2017/2018
BACHELOR'S DEGREE (BSC)	DIETISTICS
SUBJECT	IMAGE DIAGNOSTICS AND RADIOTHERAPY
TYPE OF EDUCATIONAL ACTIVITY	C
AMBIT	10731-Attività formative affini o integrative
CODE	57005
SCIENTIFIC SECTOR(S)	MED/36
HEAD PROFESSOR(S)	CARUSO GIUSEPPE Professore Associato Univ. di PALERMO
OTHER PROFESSOR(S)	
CREDITS	3
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
PROPAEDEUTICAL SUBJECTS	
MUTUALIZATION	
YEAR	2
TERM (SEMESTER)	1° semester
ATTENDANCE	Mandatory
EVALUATION	Out of 30
TEACHER OFFICE HOURS	**CARUSO GIUSEPPE** Monday 14:00 15:00 Dipartimento Diagnostica per Immagini Policlinico Palermo Tuesday 13:00 14:00 Cefpas Caltanissetta

DOCENTE: Prof. GIUSEPPE CARUSO

PREREQUISITES	Learn the fundamentals of biology and radiobiology Understanding technical justification, optimization and limitation of exposure Adopt the appropriate radiation protection techniques in order to ensure the protection of patients, exposed workers, population and territory Inform individuals undergoing diagnostic radiology investigations or radiotherapy about safety and risks associated to various procedures Evaluate professional acts involving the use of ionizing radiation sources for diagnostic and therapeutic purposes for optimal dose delivery Knowing the general principles of pathology
LEARNING OUTCOMES	Get to know, with the support of front lessons and advanced textbooks on topics related to preventive, educational, retrieval and support for individual and community health.
ASSESSMENT METHODS	Formal oral exam
EDUCATIONAL OBJECTIVES	Knowledge and understanding: Get to know, with the support of front lessons and advanced textbooks on topics related to preventive, educational, retrieval and support for individual and community health. Autonomy of judgment: Collect and interpret relevant data for preventive intervention for individual and collective health. Communicative Skills: Ability to communicate information, ideas and solutions to issues related to the acquired knowledge. Learning Capacity: They developed the necessary skills to undertake subsequent studies with a high degree of autonomy
TEACHING METHODS	Frontal lessons and self-assessment tests
SUGGESTED BIBLIOGRAPHY	DIAGNOSTICA PER IMMAGINI E RADIOTERAPIA - G. Cittadini

SYLLABUS

Hrs	Frontal teaching
20	The course aims to provide the student with an integrated health and social culture, a basic assumption of content learning and methods of preventive, educational, retrieval and support for individual and community health. The lessons will be aimed at acquiring notions regarding protectionist and radioprotection aspects aimed at preventing individual and collective health. 1. Basic Physics on R.I. 1.1 - Atoms and radioactivity 1.2 - Type of ionizing radiation 1.2 - interactions of the R.I. With matter 2. Biological effects of R.I. man 2.1 - The concept of "dose" by R.I. 2.2 - Effects of ionizing radiation on humans: deterministic and stochastic 2.3 - Words on Radioinduced Pathologies. 2.4 - The principles of radiation protection 2.5 - Physical and medical surveillance 2.6 - Statements on the Radiation Protection Act in force 3. Radiological equipment 3.1 - Roentgen tube operating principle: X-rays 3.2 - Main characteristics of radiological equipment in hospital · Traditional radiology equipment · Computed Tomography · Radiotherapy equipment · Thoughts on nuclear medicine equipment