UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Biomedicina, Neuroscienze e Diagnostica avanzata		
ACADEMIC YEAR	2017/2018		
BACHELOR'S DEGREE (BSC)	ORTHOTICS AND OPHTHALMOLOGIC CARE		
INTEGRATED COURSE	APPLIED ORTHOPTIC SCIENCES - INTEGRATED COURSE		
CODE	16902		
MODULES	Yes		
NUMBER OF MODULES	2		
SCIENTIFIC SECTOR(S)	MED/50, MED/27		
HEAD PROFESSOR(S)	GRASSO GIOVANNI	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)	GRASSO GIOVANNI CATALANO DARIO	Professore Associato Professore a contratto	Univ. di PALERMO Univ. di PALERMO
CREDITS	8		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	3		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	**GRASSO GIOVANNI** Monday 14:00 16:00 Clinica Neurochirurgica		

DOCENTE: Prof. GIOVANNI GRASSO

PREREQUISITES	Basic knowledge of the visual pathways
LEARNING OUTCOMES	Knowledge and ability to understand Students should have obtained the following knowledge and skills' understanding of: - the main brain tumors intra-axial and extra-axial; on congenital vascular malformations such as aneurysms, MAV and cavernomas and other neurosurgical diseases of interest on the visual system. Capacity to apply knowledge and understanding At the end of the course the students must have achieved capacity to translate into professional practice the knowledge acquired. They should be able to: - understand the pathophysiology of the diseases addressed and initiate diagnostic and therapeutic protocols before the specialized management. Making judgments Students must achieve capacity in critical and judgmental formulation. To this end they must have heard the argument methodological procedure, which will ensure the acquisition of these skills. 1) mode 'and teaching tools for achieving this descriptor: working groups for the discussion of issues and questions relating to study programs; active and participative classes by students, making use of dialogue, debate, reading tour of the international literature. Ability to communication Students, at the end of the course, will have to achieve the following skills: 1) know the main neurosurgical diseases with particular interest to those affecting the visual pathways. They must, therefore, know express in any form of oral information acquired and translate the information gained in clinical practice. Capacity Learning At the end of the course the students will acquire the following skills' learning: - be able to understand the main diagnostic strategies - Clinical and instrumental - for treated diseases; - Know the main multimodal therapeutic approaches; - Known prognostic and predictive factors.
ASSESSMENT METHODS	Final evaluation is performed by oral exam according to the University calendar. An optional written test also may be used. The oral exam consists of an interview, in order to check skills and knowledge of the content of the course; the interview will relate to one or more relevant open or semi-structured questions. The questions tend to verify the acquired knowledge, the ability of organization and processing clinical skills and the ability to display the same. The ability of content organization and processing turns to test the clinical argument and applying concepts in a professional context. Oral presentation ability will be evaluated with a score gradually increasing according the use of language adequate sufficiently articulated to the professional conditions. The sufficiency threshold will be is reached when the student shows knowledge and understanding of the issues at least in broad outline, and has minimal application skills in order to solve concrete cases; he/she should show too own capacity and argumentative as to allow the transmission of his knowledge to the examiner. Below this threshold, the examination will result insufficient. The more, however, the examinee is able to interact with the examiner, and how much more his/her knowledge and ability go into the details of verification, the more the assessment will be positive. The assessment is carried out of thirty. Oral examination rating : 30-30L excellent; 27-29 very good ; 24-26 good; 21-23 discreet; 18-20 sufficient; 1-17 insufficient. The written test will be divided into multiple choice or open questions for a maximum of 30. They tend to check the skills and knowledge of the course. Test consists of a series of questions, or closed stimuli, each of which is' accompanied by three or more closed answers. Skills and knowledge are not tested through an independent processing of answers to questions, but rather by choosing the correct answers or believed to be among those offered to every question. The closing of the stimulus and the response is used to determine a priori, at the time of the test construction, and therefore before it is administered, the score to be assigned to each question depending on the answer proves correct, incorrect or misleading statement. The open answers offer the chance to hold an independent exposition around a closed stimulus, with predetermined correction criteria. The written test can enrich the oral test, for content and final evaluation.
TEACHING METHODS	lectures

MODULE
APPLIED TECHNICAL AND MEDICAL SCIENCES 2

Prof. DARIO CATALANO

SUGGESTED BIBLIOGRAPHY

Liuzzi L, Bartoli F. Manuale di oftalmologia. Minerva Italica ed.
Azzolini C., Carta F., Marchini G., Menchini U. Clinica dell'apparato visivo. Ed. Masson Edra LSWR 2010
Carta F., Carta A. Neuroftalmologia. Monduzzi ed.

AMBIT	10331-Scienze dell' ortottica e dell' assistenza di oftalmologia
INDIVIDUAL STUDY (Hrs)	75
COURSE ACTIVITY (Hrs)	50

EDUCATIONAL OBJECTIVES OF THE MODULE

Students must acquire the knowledge in order to correctly interpret the signs and ocular symptoms with particular integration with the concepts learned in the other module of the course; they will have to understand the ophthalmic abnormalities related to the presence of neurological and neurosurgical diseases treated, adding even the specialists medical figures in the evaluation of ocular impairment of these clinical situations.

SYLLABUS

Hrs	Frontal teaching
2	Anatomy of the optic nerve head and visual pathways, the orbit.
5	Morphometric tools for the evaluation of the optic disc and retinal nerve fiber: principles, indications, modality of the exam, advantages and limits of HRT, OCT, GDx. Applications in congenital or acquired dysmorphism, in glaucoma, in the anterior optic neuropathies .
4	General principles of traditional and computerized perimetry, positive and negative, relative and absolute scotomas. Type and performance of the main perimeters. Examination procedures in perimetry. The perimetric indexes.
4	Perimetry nell'ambliopia and in disorders of eye motility. Perimetry in major ocular and neuroftalmologiche affections. Diagnosis of lesion level depending on the visual field defect.
5	Abnormal position of the head and squint in neurophthalmic disease.
5	Nistagmus
5	Balance and tempore - mandible articulation disorders in relation to binocular vision.
5	Orthoptic evaluation in neurological patient.

Hrs	Practice
5	Diagnostic methods in neurophthalmic diseases.
10	Perimetry nell'ambliopia and in disorders of eye motility. Perimetry in major ocular and neuroftalmologiche affections. Diagnosis of lesion level depending on the visual field defect.

MODULE
NEUROSURGERY

Prof. GIOVANNI GRASSO

SUGGESTED BIBLIOGRAPHY	
Articoli scientifici internazionali International scientific papers	
AMBIT	10324-Scienze interdisciplinari e cliniche
INDIVIDUAL STUDY (Hrs)	45
COURSE ACTIVITY (Hrs)	30
EDUCATIONAL OBJECTIVES OF THE MODULE	
Students must acquire the knowledge that will be of benefit to correctly interpret the signs and neurological symptoms related to a framework of pathology. They will have to learn concepts that will allow to frame the syndromes related to the presence of the treated neurosurgical pathologies . The course will allow , in addition, for each group of treated diseases , to acquire specific information on the epidemiological, clinical , pathophysiological , prognostic and therapeutic aspects.	

SYLLABUS

Hrs	Frontal teaching
10	Primary glial tumors
5	Extra-axial brain tumors
5	Cerebral aneurysms and AVMs
2	Cavernous angiomas
2	Hydrocephalus and other intracranial malformations
5	Diagnostic criteria and multimodal therapy
1	Multimodal therapy and future perspectives