



UNIVERSITÀ DEGLI STUDI DI PALERMO

DEPARTMENT	Scienze Psicologiche, Pedagogiche, dell'Esercizio Fisico e della Formazione		
ACADEMIC YEAR	2016/2017		
MASTER'S DEGREE (MSC)	SCIENCE OF PREVENTIVE AND ADAPTED PHYSICAL ACTIVITY AND SPORT PERFORMANCE		
SUBJECT	NEUROLOGY		
TYPE OF EDUCATIONAL ACTIVITY	B		
AMBIT	50537-Biomedico		
CODE	90414		
SCIENTIFIC SECTOR(S)	MED/26		
HEAD PROFESSOR(S)	BRIGHINA FILIPPO	Professore Associato	Univ. di PALERMO
OTHER PROFESSOR(S)			
CREDITS	6		
INDIVIDUAL STUDY (Hrs)	110		
COURSE ACTIVITY (Hrs)	40		
PROPAEDEUTICAL SUBJECTS			
MUTUALIZATION			
YEAR	2		
TERM (SEMESTER)	1° semester		
ATTENDANCE	Not mandatory		
EVALUATION	Out of 30		
TEACHER OFFICE HOURS	BRIGHINA FILIPPO Wednesday 15:00 - 16:00 Neurofisiopatologia Policlinico c/o/o Istituto Medicina del lavoro, via del Vespro 143: previa prenotazione via mail: filippobrighina@gmail.com		

DOCENTE: Prof. FILIPPO BRIGHINA

PREREQUISITES	Basic anatomic and physiological knowledge of the nervous system
LEARNING OUTCOMES	<p>Knowledge of the: 1 basic anatomo-physiological aspects and clinical clues of the principal nervous system diseases; 2: neurophysiological bases of movement in normal and pathological conditions in humans;</p> <p>Comprehension of: relevance of neuroanatomic, neurophysiological and neuropathological knowledge in planning and monitoring physical exercise;</p> <p>Ability to: 1. recognize principal functional neurologic abnormalities that can interfere directly (motor system dysfunction) or indirectly (diseases affecting sensation, coordination and cognitive abilities) with physical exercise. 2. to guide sportsmen or athletes affected by neurological diseases to the correct way to deal with sport and physical exercise.</p> <p>Judgement ability: to acquire expertise for evaluating general neurological state and potential changes in motor activity to appropriately tailor motor exercise plan to specific individual patient's needs.</p> <p>Communicative ability: to acquire competence to establish effective interaction with: 1 the patient, to favor his/her best compliance to the planned exercise; 2. other professional figures involved in the management of the disable subject also to opportunely benefit from interdisciplinary cross-talk.</p> <p>Learning ability: to acquire ability to follow continuous knowledge updating in the field, translating it in the exercise plan; ability to change and ameliorate approaches and exercise strategies based on professional experience.</p>
ASSESSMENT METHODS	<p>Oral examination; score 18-30:</p> <p>30-30 cum laude: excellent; very good knowledge of the subject topics, perfect use of language, very good insight, the student is able to apply the acquired knowledge to solve the problems asked by the examiner.</p> <p>26-29: very good; good competence about the topic studied; correct use of language; ability to manage the acquired knowledge to solve problems asked by the examiner.</p> <p>24-25: good; basic knowledge of the subject topics, basic language ability; limited capacity to apply knowledge to solve problems asked by the examiner.</p> <p>21---23: just acceptable: not full competence about subject topics , acceptable language use, poor ability to apply the acquired knowledge.</p> <p>18-20: minimal knowledge about the principal subject topics and about technical language; severe limitation or completed inability to apply knowledge to solve specific problems.</p>
EDUCATIONAL OBJECTIVES	The main educational aims are: 1.acquisition of knowledge about the relevance of the central and peripheral nervous systems in motor activity with particular reference to sport and physical exercise. 2. acquisition of basic knowledge to the understanding of the organization of the nervous system, mechanisms of motor control, of sensorimotor and visual-motor integration and of functional systems underlying motor learning and adaptation 3.learning of the pathophysiological and pathogenetic basis of the main neurological diseases that underlie disorders of motor function . 4.Knowledge of exercise potential in the prevention of cerebrovascular and degenerative diseases .
TEACHING METHODS	Traditional, face-to-face lectures
SUGGESTED BIBLIOGRAPHY	Neurologia; autori: J. Cambier; M Masson, H. Dehen, Decima edizione italiana - Casa Editrice Masson Il Bergamini di Neurologia; autori: Bergamini - Lopiano - Mutani - Durelli - Mauro - Chio', Editore: Edizioni Libreria Cortina Torino , Edizione: III 1/2012

SYLLABUS

Hrs	Frontal teaching
3	Motor and sensory systems
3	Coordination and sensory-motor integration
3	Motor learning and motor adaptation
3	Cerebral plasticity
4	Neurophysiological and neuroimaging techniques applied to the study and diagnosis of motor system diseases
2	Disease of cranial and peripheral nerves
2	Disease of muscle and neuro-muscular junction
4	Demyelinating diseases
4	Motor neuron diseases
4	Cerebrovascular disease
4	Parkinson's disease and other extrapyramidal illnesses
2	Cognitive functions and dementias
2	Epilepsies