

8.0 credits

75.0 h + 12.0 h

Teacher(s) :	Olivier Etienne (coordinator) ; Missal Marcus ; Mouraux André ;
Language :	Français
Place of the course	Bruxelles Woluwe
Main themes :	<p>Ex cathedra teaching : general organisation of the central nervous system (neuroanatomy), general neurophysiological mechanisms, neurophysiology of sense organs, neurophysiology of motor systems, physiological mechanisms of the development of the nervous system, plasticity of the adult brain, and psychophysiology (memory, emotions, cognitive functions, sexual differentiation of the brain, sleep)</p> <p>Principles of neuro-vegetative control.</p> <p>Practicals: some of the topics explained ex cathedra are further explored and illustrated such as: vision, eye movements, evoked potentials, reflexes and motor control. The aim is to bring the student to an active and reflexive posture in front of real and concrete phenomenon's observed on themselves or classroom's mates</p>
Aims :	<p>Knowledge of the anatomical structures and physiological mechanisms of the nervous system responsible for human behaviour</p> <p>Knowledge of the pathophysiological bases of main dysfunctions of this system.</p> <p>Knowledge of the principles of the nervous control of other physiological systems.</p> <p><i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i></p>
Content :	<p>The ex cathedra course is divided into three main parts.</p> <p>The general organisation of the nervous system, general neurophysiological mechanisms, phylogenetic and ontogenetic considerations, neurons, glial cells, blood-brain barrier, meninges and ventricular system, vascular system of the brain, the spinal chord, the encephalon and the vegetative nervous system.</p> <p>Sensorimotor neurophysiology: sensory information in general, the somesthetic system including pain, vision including eye movements, audition, vestibular system, taste and olfaction, the control of movement and the vegetative nervous system.</p> <p>Psychophysiology: development and plasticity, learning and memory, emotions, diffuse neuromodulator systems, cognitive functions and language, cerebral rhythms and sleep.</p> <p>The practicals are concerned by: vision and ophthalmoscopy, eye movements and equilibrium, somatic evoked potentials and reflexes and transcranial stimulation.</p>
Other infos :	<p>Prerequisite and related courses are: cellular biology, general physiology, embryology, biochemistry, histology anatomy and psychology.</p> <p>Evaluation is done by a written examination.</p>
Cycle and year of study :	<u>> Bachelor in Medecine (Bachelor + Master : 7 years)</u>
Faculty or entity in charge:	MED