



Teacher(s)	Hanson Philippe coordinator ;Jeanjean Anne ;Mormont Eric (compensates Jeanjean Anne) ;Ossemann Michel (compensates Jeanjean Anne) ;Stoquart Gaëtan ;Stoquart Gaëtan (compensates Jeanjean Anne) ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes	The main topics dealt with in this course are: stroke, pyramidal, extrapyramidal and cerebellar syndromes, stroke, spinal cord injuries, traumatic brain injuries, Parkinson's disease, multiple sclerosis, peripheral nerve lesions and myopathy. Basic Neuropediatrics will also be introduced. For each of these topics, teachers will draw students attention to the physiopathological issues crucial to a proper understanding of the consequences of the affections requiring therapeutic intervention. Students will be taught the principles and techniques of treatment as they relate to different stages of development of these affections. They will also be introduced to the instruments used to evaluate the state of advancement and development of a particular affection.
Aims	<p>By the end of this course, students should be familiar with the basic physiopathology and symptomology of the principal neurological pathologies in adults. They should also be aware of the indications and objectives of Physiotherapy treatments. They should know the basics of the principal rehabilitation techniques currently in use and be able to adopt a critical approach towards these techniques. They will have learnt how to adapt their treatments in accordance with the properties of particular biomaterials to prevent tissue lesions. They will also be able to design and justify personalized treatment plans, adapted to the degree of severity and stage of development of each pathology. They will be familiar with the instruments used to evaluate perceptual-motor and functional skills.</p> <p>-----</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	This course aims to teach students the physiopathology, symptomatology, indications and physiotherapy techniques for each of the pathologies listed in the course description (pyramidal, extrapyramidal and cerebellar syndromes, stroke, spinal cord injuries, traumatic brain injuries, Parkinson's disease, multiple sclerosis, peripheral nerve lesions and myopathy). Basic Neuropediatrics will also be introduced. It examines in detail the different stages of development of these pathologies, with particular emphasis on the therapeutic requirements, indications and contraindications at each stage, and the objectives and limitations of treatment. For all these pathologies of the central nervous system, students' attention will be drawn to the many problems (motor and sensory, cognitive, visual, balance, swallowing and sphincter-related) which have to be taken into consideration when drawing up a treatment plan and putting it into action. The teaching draws on real-life examples, videos and photographic material are used, case-studies are analysed and clinical demonstrations are used by way of illustration. As such, this course should prepare students for active involvement in dealing with the principal pathologies of the nervous system during their first on-the-job training period.
Bibliography	<p>-Duane E Haines. Neuroanatomy. An atlas of structures, sections and systems. 7th Edition. Wolters Kluwer. Lippincott Williams and Wilkins 2008.</p> <p>-Laterre. Sémiologie des maladies nerveuses. De Boeck 2008.</p> <p>-Keus SHJ et al. Evidence-based analysis of physical therapy in Parkinson's disease with recommendations for practice and research. Movement Disorders 2007; 22 : 451-460.</p> <p>-Bloem B et al. Nonpharmacological treatments for patients with Parkinson's disease. Movement Disorders 2015; 30 : 1504-1520.</p> <p>-Radder DLM. Physical therapy and occupational therapy in Parkinson's disease. International journal of Neuroscience 2017; 127 : 930-943.</p> <p>2.6.0.0</p>
Other infos	Pre-requisite: Anatomy and Physiology of the Nervous System, Biomechanics and Movement Analysis, Basic Techniques in Physiotherapy Evaluation: oral examination with written preparation Support: course handout and/ or course books Supervision: course-holders and technical advisorsOthers
Faculty or entity in charge	FSM

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Teacher Training Certificate (upper secondary education) - Physical Education	EDPH2A	7		
Bachelor in Physiotherapy and Rehabilitation	KINE1BA	7	LIEPR1002 AND LIEPR1028 AND LIEPR1011 AND LIEPR1007	
Master [120] in Motor Skills: Physical Education	EDPH2M	7		