UCLouvain

## Ikine1036

2024

## Complements of Neurophysiology

3.00 credits 30.0 ft Q2	3.00 credits	30.0 h	Q2
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Teacher(s)	Duque Julie (coordinator) ;Hardwick Robert ;Nozaradan Sylvie ;				
Language :	French > English-friendly				
Place of the course	Louvain-la-Neuve				
Prerequisites	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.				
Main themes	Key topics to meet these objectives. The description of the neurophysiological basis of pain perception. Nervous mechanisms and functioning of inter-hemispheric interactions and their role in motor control. The main mechanisms of nervous motor control areas by frontal and parietal cortex. The neurophysiological basis of memory and learning. The description of the phenomenon of plasticity in the central nervous system and their mechanisms.				
Learning outcomes	At the end of this learning unit, the student is able to:  At the end of this entity of education, students should be able to understand the foundations of science in neuroscience through the study of nervous mechanisms particularly suited to the neurological rehabilitation. It should also be able to undertake the critical reading of a scientific article published in the field of neuroscience.				
Evaluation methods	Written exam with Multiple Choice Questions				
Teaching methods	Ex-cathedra courses, either face-to-face or distance learning.  Some courses will be in English. This concerns about 1/3 of the courses.  The courses of Julie Duqué are in podcast and can be found on the Ezcast platform.				
Content	Students will be able to understand the foundations of science in neuroscience through the study of nervous mechanisms particularly suited to neurological rehabilitation. Students will also be able to undertake the critical reading of a scientific article published in the field of neuroscience. Key topics to meet these objectives can vary and include for example:  - Cerebral lateralization and inter-hemispheric interactions.  - Decision making, action selection and inhibitory control.  - Addictions.  - Emotions.  - Memory and learning.  - Brain plasticity.  - Perception of faces.  - Hearing, perception of rhythms and music.  - Sleep.  - Autonomic nervous system.				
Other infos	Language used for the courses: French and English Evaluation: Written exam Support: Course slides on Moodle Supervision: Titulars This course is given partially in English.				
Faculty or entity in charge	FSM				

Programmes containing this learning unit (UE)						
Program title	Acronym	Credits	Prerequisite	Learning outcomes		
Bachelor in Physiotherapy and Rehabilitation	KINE1BA	3	LIEPR1021 AND LIEPR1022 AND LIEPR1024 AND LKINE1024	<b>Q</b>		