lpsys2928

2024

Clinical neuroscience

4.00 credits	30.0 h	Q2

Teacher(s)	Edwards Martin ;
Language :	English
Place of the course	Louvain-la-Neuve
Main themes	The course will cover the following topics: - Brain plasticity - The contribution of neuroscientific and other technologies for the diagnosis of neuropsychological deficits - The contribution of neuroscientific and other technologies to assist rehabilitation of neuropsychological deficits - The contribution of neuroscientific and other technologies to measure the effectiveness of neuropsychological interventions. The specific cognitive domain covered will depend on the teacher's expertise.
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 At the end of this teaching unit, the student will be able to: - Complement her/his clinical analysis of an individual with neuroscientific data (A1 and A2) - Assess the effectiveness of neuropsychological interventions on the basis of neuroscientific data (E2) - Understand the contribution and limits of different neuroscientific methods and technologies for the diagnosis and rehabilitation of neuropsychological deficits (A1, B1, E1, E2). In addition, the written coursework will allow reinforcing the ability to communicate critical thinking on a neuroscientific topic (C1 and C2). Finally, self-learning opportunities will allow the student to assess and increase his/her professionalism and competences (F1 and F2).
Evaluation methods	There are two evaluations of the course. • The first evaluation is an individual work involving a detailed report about the use of neuroscientific methods to enhance clinical patient diagnosis. The student will select a specific title from Moodle, and the titles will be closely linked to the course materials. The evaluation is worth 50% of the total final grade. • The second evaluation is reverse classroom group work that involves the development of a serious game for the purpose of patient diagnosis and rehabilitation. The students have to develop a prototype serious game, and present the serious game to the other students. The evaluation is worth 50% of the total final grade. The final grade will consist of the 2 integrated evaluations. Successful completion of these two assessments is essential to demonstrate the skills and knowledge defined in the learning outcomes of the course. Successful completion of the course can only be achieved by passing each of the evaluation activities.
Teaching methods	Lectures and a reverse classroom exercise
Content	The course will cover the following topics: • Modern methods of patient diagnosis • The contribution of neuroscientific techniques to develop a better understanding of neurological diseases and neuropsychological disorders • The contribution of neuroscientific techniques and other technologies to assist in the rehabilitation of neuropsychological disorders. • The contribution of neuroscientific techniques and other technologies to measure and predict the effectiveness of neuropsychological interventions. • The mechanisms of cerebral plasticity.
Inline resources	The Moodle Platform
Bibliography	Le cours utilisera des articles scientifiques spécifiques qui sont disponibles à la bibliothèque de l'UCLouvain. The course will use specific scientific articles that are available through the UCLouvain library.

Other infos	The courses uses an "English friendly / French friendly" format • The course is given in English, with the slides written in English. • The core reading for the course is in English. • There is no exam. • Instead, there are two courses works, each worth 50%. These works can be made in French or English. • The discussions during the course activities can be made in French or English. The use of generative artificial intelligence (AI) is permitted for individual and group work. Students are required to follow the specific instructions available on Moodle concerning the conditions of use of generative AIs within the course.
Faculty or entity in charge	EPSY

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Psychology	PSY2M	4		🔍