Universitat Autònoma de Barcelona

2023/2024

Clinical Neuropsychology

Code: 102544
ECTS Credits: 6

Degree	Type	Year	Semester
2502443 Psychology	OT	4	1

Contact

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Teaching groups languages

You can check it through this link. To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Prerequisites

No prerequisites are required.

However, it is advisable to review the cerebral anatomy and its main transmission systems, since the psychobiologic knowledge contributes to locate and to understand more easily the disorders related with brain disfunction.

Objectives and Contextualisation

Neuropsychology helps to understand the cognitive functioning of human beings, and allows us to know the alterations that can be observed in people suffering from brain dysfunction or injury. During the last decades, the relevance of this discipline has been increasing, to the point of becoming essential in the group work of many diagnostic and intervention teams for patients with cognitive disorders, both in the adult and child area. Clinical Neuropsychology framed, then, in the field of Clinical Psychology and its contents are projected at the level of diagnosis and intervention.

In this context, the following objectives for the students are proposed:

1 - To Learn the main areas of intervention in neuropsychology, and identify which people are susceptible to intervention by a professional expert in neuropsychology.

2 - To Know different and common neurological diseases in adults and children who usually cause cognitive and behavioral disorders.

3 - To understand which are the brain mechanisms that are involved in cognitive disorders

4 - To know which are the main cognitive disorders observed in clinical practice and which of them are indicators of brain dysfuncion.

5 - To have an overview of the relevance of working in a multidisciplinary team and learn to detect possible indicators of brain dysfunction

Competences

- Criticise the effects of personal practice on people, taking into account the complexity of human diversity.
- Formulate hypotheses about the demands and needs of the recipients.
- Maintain a favourable attitude towards the permanent updating through critical evaluation of scientific documentation, taking into account its origin, situating it in an epistemological framework and identifying and contrasting its contributions in relation to the available disciplinary knowledge.
- Obtain and organise relevant information for the service requested.
- Recognise the diversity of human behaviour and the nature of differences in it in terms of normality abnormality and pathology.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.

Learning Outcomes

1. Apply communication skills.
2. Communicate in an inclusive manner avoiding the use of sexist or discriminatory language.
3. Criticise the effects of personal practice on people, taking into account the complexity of human diversity.
4. Demonstrate knowledge of the lexicon of the subject.
5. Formulate hypotheses and identify factors that determine the current problematic behaviour.
6. Maintain a favourable attitude towards the permanent updating through critical evaluation of scientific documentation, taking into account its origin, situating it in an epistemological framework and identifying and contrasting its contributions in relation to the available disciplinary knowledge.
7. Make diagnoses of psychological disorders in practical clinical cases presented.
8. Propose projects and actions that incorporate the gender perspective.
9. Recognise the psychopathological manifestations of each disorder, associated symptoms, and epidemiological tendencies taking the gender perspective into account.
10. Summarise the principle factors and variables of functional behavioural analysis.

Content

1: General introduction

to. Definition

b. Areas of study and intervention in Neuropsychology

c. Historical background of current neuropsychology

2: Lateralization and hemispheric connection

a). Brain asymmetries in the organization of cognitive functions

b. Language and manual laterality

c. Brain organization of cognitive functions.

3: Cerebral assessment techniques

a. Historical techniques: The use of tachistoscopy in Neuropsychology. Dichotic listening

b. Introduction to brain neuroimaging: the value of CT, MRI , PET and SPECT in Clinical Neuropsychology.

c. Clinical assessment organization

4: Attention Disorders

a. The Acute Confusional State

b. The Neglect Syndrome

5: Memory disorders

a. Amnesias: Description of the main causes and the most frequent pathologies that causes amnesia: Traumatic Brain Injury, Korsakoff syndrome, anoxias, encephalitis ...

b. Neurological versus psychogenic amnesia

c. Transient amnesias: Transient Global Amnesia, amnesia secondary to TEC, Epilepsy ...

6: Language diseases:

a. aphasia

b. alexia

c. agraphia

7: agnosia:

a. visual agnosia

b. auditory agnosia

c. tactile agnosia

8: Apraxia:

a. Mechanisms and circuits involved in apraxia

b. Main apraxias (ideomotor, ideatory, constructive, etc.)

9: The frontal lobe diseases

a. cognitive disorders

b. behavioral disorders

c) Main frontal lobe syndromes

10: Introduction to brain pathology which causes cognitive and behavioral deficits

to. Neuropsychology of dementias

b. Cerebral vascular pathology and cognition

c. Traumatic Brain Injury and Cognitive Deficits

Methodology

The teaching methodology is based on two blocks:

a) Classes in the classroom with the whole group: in the form of interactive lecture / teaching to guide the student in the basic content schemes that will allow him to expand the information and research on each subject. The objective is contributing in a directive way to decide which are the most important topics and content. The teacher will provide practical information and additional examples to the bibliography.

b) Practical seminars, where students fundamentally work on clinical cases that exemplify the disorders that have been described and worked on in theory classes. These sessions will be conducted with total classroom groups divided by four, and will be based on cases in video or on paper to work in the classroom itself.

The proposed teaching and assessment methodologies may experience some modifications as a result of the restrictions on face-to-face learning imposed by the health authorities. The teaching staff will use the Moodle classrom or the usual communication channel to specify whether the diferent directed and assessment activities are to be carried out on site or online, as instructed by the faculty.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Classroom clinical practices (seminar in samll groups)	12	0.48	1, 3, 7, 5
Conference	24	0.96	3, 4, 5, 6, 10
Type: Supervised			
Following sessions and students problem solutions	8.5	0.34	
Type: Autonomous			
To Study	40	1.6	
Getting information and reading texts and papers	42.5	1.7	
Work about theory and clinical cases	20	0.8	

Assessment

It will be necessary the realization of three evaluation activities:

- 2 written tests that will be of test type questions related both to the contents taught in the theoretical classes and in the practical classes. Exams will be answered in each of the two evaluation periods determined by the Faculty. The mark of these two exams represents 80% of the total qualification. The second exam is cumulative, and the student is examined of the whole course. The EV1 will be on 1st assessment period and the EV2 will be on 2on assessment period.

- A compilation of information about a topic proposed by the teacher about some aspect related to the course program. The work will be done in groups of four students, it will be based mainly on the results of an updated bibliographic search, and finally students will exhibit it in class. It assumes 20% of the overall qualification. The students expositions will be distributed along the course

Final qualification: it will be obtained from the weighted average of the three learning evidences. There will be a weighted grade of 5 to pass the course.

Definition of non evaluable student: A student who has delivered evaluation activities with a weight equal to or greater than 40% of the total activities can not be considered "not evaluable".

Students who have followed evaluation activities with a weight equal to or greater than 2/3 of the total evaluation ratio, will have the opportunity to perform a resit examination. It will be necessary to obtain a grade lower than 5 points and greater than or equal to 3,5 points.

The resit examination will consist of a new exam in which the full content of the course will be evaluated. It will be answered in the resit evaluation period determined by the Faculty. The grade of this final exam only allow the student to obtain the minimum qualification to pass the subject, and it will be the final note.

No unique final synthesis test for students who enrole for the second time or more is anticipated.

SINGLE ASSESSMENT

The single assessment entails the renunciation of continuous assessment and will consist of:

-Two written exams (EV1 and EV2) that will consist of multiple-choice questions related to both the theoretical and practical material covered in the classes. The grade for these exams accounts for 80% of the total grade for the subject (40% for each exam).

-A literature review on a topic that will be agreed upon with the professor in advance, and the presentation of the findings in a PowerPoint format. The presentation will take place on the same day as the written exam and will carry a weight of 20%.

The single assessment is expected to last approximately 4 hours. It will be conducted in the second evaluation period.

The same resit process as the continuous assessment will be applied.

You can see the evaluation guidelines of the faculty in the following link:
https://www.uab.cat/web/estudiar/graus/graus/avaluacions-1345722525858.html

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
EV1 Exam 1	40%	1.5	0.06	1, 2, 3, 4, 7, 5, 6, 8, 9, 10
EV2 Exam 2 (cumulative)	40%	1.5	0.06	1, 2, 3, 4, 7, 5, 6, 8, 9, 10
EV3 Bibliografic Review	20%	0	0	1, 2, 3, 4, 7, 5, 6, 8, 9, 10

Bibliography

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Javier Tirapu Ustárroz y cols. (2012). Neuropsicología de la corteza prefrontal y las funciones ejecutivas.Editorial Viguer

Lapuente,R. (2010). Neuropsicología. Madrid, Plaza edición.

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Jódar, M (ed). (2005). Trastornos del lenguaje y la memoria. Editorial UOC *DIGITAL BOOK IN UAB LIBRARY:* ISBN: 978-84-9029-774-2, 978-84-9064-004-3.

Michael J. Aminoff ... [et al.](2008). Neuropsychology and behavioral neurology [Recurs electrònic] / edited by ISBN 9780444518972 Publicació Amsterdam : Academic Press.

Software

Aren't necessary special programs for the subject