

Degree programme	Type	Course
Psychology	OP	4

Contact lecturer

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Prerequisites

No prior prerequisites are required.

However, it is recommended to review the functional anatomy of the brain, as well as its main neurotransmission systems, since knowledge of psychobiology helps provide a better understanding of the disorders that arise from their dysfunctions.

Objectives

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

Learning outcomes

1. Summarise the principle factors and variables of functional behavioural analysis.

2. Make diagnoses of psychological disorders in practical clinical cases presented.
3. Formulate hypotheses and identify factors that determine the current problematic behaviour.
4. Apply communication skills.
5. Demonstrate knowledge of the lexicon of the subject.
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. Criticise the effects of personal practice on people, taking into account the complexity of human diversity.
8. Propose projects and actions that incorporate the gender perspective.
9. Communicate in an inclusive manner avoiding the use of sexist or discriminatory language.
10. Recognise the psychopathological manifestations of each disorder, associated symptoms, and epidemiological tendencies taking the gender perspective into account.

Contents

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. Women's brain language plasticity

b. Language and manual laterality

c. Brain organization of cognitive functions.

3: Cerebral assessment techniques

a. Historical techniques: The use of tachistoscopia 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

Learning activities and methodology

Title	Hours	ECTS	Learning outcomes
Conference	24	0.96	3, 4, 6, 7, 9, 10
Classroom clinical practices (seminar in small groups)	12	0.48	1, 3, 4, 5, 6, 10
Work about theory and clinical cases	20	0.8	2, 3, 4, 5, 6, 7, 8, 10
Getting information and reading texts and papers	42.5	1.7	1, 6, 7, 10
To Study	40	1.6	2, 3, 5, 6, 7, 8, 10
Following sessions and students problem solutions	8.5	0.34	3, 6, 8, 9

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.

Assessment

Continuous assessment activities

Title	Weight	Hours	ECTS	Learning outcomes
EV2 Exam 2 (cumulative)	40%	1.5	0.06	1, 3, 5, 10
EV3 Oral presentation of a Bibliographic Review	20%	0	0	1, 2, 3, 4, 5, 6, 7, 8, 9
EV1 Exam 1	40%	1.5	0.06	1, 3, 5, 10

It will be necessary the realization of three evaluation activities:

- 2 written multiple choice 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. The language of the exams will be catalan, but its traduction will be able whether the requirements established in article 263 will be met, and the request will be made electronically before week 4. (More information on the faculty website)

- An oral presentation 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

- The return of EV1 and EV2 will be conducted in class generally during the first session after the grades are published. Additionally, students will be able to contact the professor directly to discuss in more depth any questions they may have. During the exam review, specific feedback can also be provided for individual cases. The feedback for the oral presentation will be sent via email to the members of the groups that made each presentation.

Final qualification: The final grade will be calculated as the weighted average of the three learning assessments. To pass the course, students must obtain a grade of at least 4 in each of the three assessments and a final weighted grade of at least 5.

If these requirements are not met, the highest grade that will be recorded on the academic transcript will be 4.5.

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 enrol 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.

The single evaluation is requested electronically (e-form) in the specific period. You can see the evaluation guidelines of the faculty in the following link:

<https://www.uab.cat/web/estudiar/graus/graus/avaluacions-1345722525858.html>

Bibliography

Main Bibliography

Forn, C. (2020): Manual de Neuropsicología, Madrid, Editorial Pirámide.

Bryan Kolb, Ian Q. Whishaw (2017): Neuropsicología humana. Editorial Médica Panamericana, Barcelona

Jódar, M (Ed) y cols (2014). Neuropsicología. Barcelona, Editorial UOC *VERSIÓ DIGITAL EN BIBLIOTECA UAB*: ISBN: 978-84-9029-774-2, 978-84-9064-004-3.

Complementary Bibliography

CH. Prat (2025) La neurociencia de tu cerebro. Cómo la neurociencia explica que cada cerebro es diferente y te ayuda a entender el tuyo. Ed. Pinolia.

M Triviño y cols. (2020). Neuropsicología a través de Casos Clínicos: Evaluación y Rehabilitación (2 Ed). Ed. Panamericana.

Junqué, C. I Barroso, J (2009). Neuropsicología. Madrid, Ed. Síntesis

Atles cerebral i més informació interessant a : <https://www.brainfacts.org/3D-Brain#intro=true>

Diccionari de neurociència: <https://www.termcat.cat/ca/diccionaris-en-linia/140>

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

Software

Aren't necessary special programs for the subject. Only internet connection and audio

Course groups and languages

The information provided is provisional until November 30. After this date, you will be able to consult the language of each group through this [link](#). To access the information, you will need to enter the course CODE

Type of teaching	Group	Language	Semester	Shift
(TE) Theory	1	Catalan	first semester	morning-mixed
(SEM) Seminars	111	Catalan	first semester	afternoon
(SEM) Seminars	112	Catalan	first semester	afternoon
(SEM) Seminars	113	Catalan	first semester	afternoon
(SEM) Seminars	114	Catalan	first semester	afternoon