

**COURSE DATA****DATA SUBJECT**

Code: 33338
Name: Neuropsychology
Cycle: Undergraduate Studies
ECTS Credits: 4.5
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1319 - Degree in Psychology	Facultat de Psicologia i Logopèdia	4	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1319 - Degree in Psychology	Neuropsychology	ELECTIVES

COORDINATION

ESPERT TORTAJADA RAUL

SUMMARY

Neuropsychology is a scientific discipline mainly clinical, converging between neurology and psychology. Neuropsychology studies the effects of injury, damage or malfunction in the central nervous system structures on cognitive, psychological or emotional processes. These effects or deficits can be caused by head trauma, stroke, brain tumors, neurodegenerative diseases (eg Alzheimer's, multiple sclerosis, Parkinson's, etc..) or neurodevelopmental diseases (epilepsy, autism spectrum disorders, cerebral palsy, a condition attention deficit / hyperactivity disorder, etc..). These etiologies discussed above can affect various cognitive domains such as language, attention, memory, gnosis, praxis, abstract reasoning, or intelligence, among others. For the diagnosis of these conditions the neuropsychologist use a battery of neuropsychological or structural/functional neuroimaging, in order to design specific programs of rehabilitation or cognitive stimulation to try to recover or replace lost cognitive function after injury.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS



It is recommended that students have passed the subjects of Physiological Psychology I and II.

COMPETENCES / LEARNING OUTCOMES

1319 - Degree in Psychology

Be able to conduct an abbreviated neuropsychological assessment on a real volunteer.

Be able to make a diagnosis according to professional criteria

Be able to write a neuropsychological report of a real clinical case.

Know how to analyse and interpret the results of assessment.

Know how to provide appropriate feedback to patients.

Know the different neuropsychological disorders, the techniques for their diagnosis and their main etiologies.

Know the mechanics for administering neuropsychological tests.

DESCRIPTION OF CONTENTS

1. Techniques in Neuropsychology

Post-mortem macroscopic analysis

Microscopic analysis

In vivo lesion analysis: Structural neuroimaging and neuromodulation

Classical instrumental method in neuropsychology

Functional method: Neurophysiological and nuclear medicine techniques

2. Etiologies in acquired damage injury

Vascular pathology

Brain tumors

Traumatic brain injuries (TBI)

Central nervous system infections

3. Neuropsychological syndromes

1. AMNESIAS

Types of memory and amnesias



Neuroanatomy and neurophysiology of memory
Most common etiologies of persistent-transient amnesias

2. *APHASIAS, ALEXIAS, AGRAPHIAS, AND ACALCULIAS*

Neural models of language
History of aphasiology
Semiology of cortical, subcortical, and primary progressive aphasias
Semiology of alexias
Semiology of agraphia
Semiology of acalculia

3. *AGNOSIAS*

Definition and types of agnosias
Neurotomy of vision
Visoperceptual, visuospatial, and visuosconstructive disorders
Auditory agnosias and somatognosias

4. *FRONTAL LOBES*

Introduction and History
Anatomy of the Frontal Lobe
Cognitive and Emotional Functions
Executive Functions
Frontal Syndromes and Signs

5. *DEMENTIAS*

Successful Aging: Neuroanatomical and Neurophysiological Changes
Neuropsychology of Aging
Dementias: General Aspects
Alzheimer's Disease

4. Neuropsychological evaluation

Neuropsychological Evaluation: Main test
History and neuropsychological report

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theoretical and practical classes	45,00
Total hours	45,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	5,50



Individual or group project	10,00
Independent study and work	30,00
Preparation of lessons	20,00
Resolution of case studies	2,00
Total hours	67,50

TEACHING METHODOLOGY

Scheduled tutoring individual or group to supervise practical work, guidance and resolution of doubts.

Individual learning activities and group practical activities.

Lectures with audiovisual presentations and new techniques and technologies on major diseases in clinical neuropsychology.

Practices about how to use neuropsychological assessment tests and scales, watching videos and clinical case studies of real patients on various neurological conditions, including the realization of a real neuropsychological assessment.

EVALUATION

The *evaluation system* will be the same in both 1st and 2nd call.

ES1.- *Assessment of theoretical and practical content by means of oral, written or skills fulfillment tests.* This section constitutes 70% of the final mark (7 points).

The performance test on the level of theoretical knowledge reached by the student will be carried out in the form of a multiple-choice exam of 40 items, with multiple choice questions with 3 alternatives.

ES2.- *Oral or written presentation of reports, individual or group work, clinical cases, problem solving and management of diagnostic tests.* This section constitutes 30% of the final mark (3 points). A work will be carried out that will consist of a neuropsychological assessment and the preparation of a deliverable report based on the real clinical data of a relative (preferably a grandfather or father/mother) following the guidelines that will be given to the class through an ad hoc neuropsychological protocol. This section can be recovered in the second call by means of a new or improved neuropsychological report, which will be delivered before the official date established.

Minimum requirements for both the 1st and 2nd call

- Obtain 3.5 points out of 7 in SA1.

- Obtain a minimum of 5 points out of 10 in the final grade.

The note of the work (neuropsychological report) will be saved for the second call (July) in case of failing the multiple-choice exam or not appearing at the first call. If the student takes the exam, she will not be able to renounce the result obtained in order to raise the grade in the second call. No student will be able to change groups for scheduling



reasons once they have been officially enrolled.

Warning about plagiarism

The copying or manifest plagiarism of any evaluable activity will mean the manifest impossibility of passing the subject, immediately submitting to the appropriate disciplinary procedures.

It must be taken into account that, in accordance with article 13 d of the university student statute (RD 1791/2010 September 30), students must avoid the use of fraudulent procedures in the evaluation tests, the work they carry out or in the official documents of the University.

In the event of fraudulent practices, the procedure determined by the Protocol for action against fraudulent practices at the University of Valencia (ACGUV 123/2020) will be followed: <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>

Grading system

The evaluation of the subject and the challenge of the grade obtained are subject to the Regulation of Evaluation and Qualifications of the University of Valencia for Bachelor's and Master's degrees (ACGUV108/2017 of May 30) http://www.uv.es/graus/normatives/2017_108_reglament_avaluacio_qualificacio.pdf

In accordance with this regulation, the numerical expression of grades from 0 to 10 is specified with a single decimal using the following:

- From 0 to 4.9: suspense
- From 5 to 6.9: approved
- From 7 to 8.9: remarkable
- From 9 to 10: Outstanding or Outstanding with honors.

Honors (1 for every 20 students) will be awarded directly to the best grades (always from 9). In the case of identical grades from the MH candidates, the teacher may carry out an oral test.

The different sections contemplated in the evaluation will only be added when the minimum requirements established for each of them are exceeded.

The grade obtained in the first call will be included in the course report in accordance with the following rules:

- If there is no rating in the evaluation section with the highest weighting, the rating will be NOT SUBMITTED, regardless of the rest.

-If there is a qualification in the evaluation section with the highest weighting and it does not meet the minimum requirements, a FAIL will be given and its numerical grade based on 10 of the qualification of this section.



-If there is a grade in the evaluation section with the highest weighting and it exceeds the established minimum requirements, but the minimum requirements are not met in another section, a FAIL (and its numerical grade based on 10) will be recorded in the section not passed.

The second call will proceed according to the following rules:

-The NOT PRESENTED option will only be used when the student has not submitted to more than one of the evaluation sections among those with the highest weighting.

-If there are grades in all sections of the evaluation and the minimum requirements are not met in any of them, a FAIL (and the corresponding base ten grade) will be placed in the section not passed. If there were more than one section not passed, the highest grade will be included in the fail.

-If none of the minimum requirements are exceeded or any evaluation section is missing, the student will obtain a FAIL (with their numerical grade), with 0.0 being the part not presented (maximum possible 4.9).

There is a regulation on contesting grades. Consulting and challenging the grade obtained will be subject to the provisions of the rules for challenging grades (ACGUV of April 29, 2008) ([http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C9 .pdf](http://www.uv.es/=sgeneral/Reglamentacio/Doc/Estudis/C9.pdf)).

Advance of the call

Regarding the possibility that a student requests an advance of the call, as established by current regulations, the evaluation will consist of the mandatory completion of an exam on theoretical and practical knowledge (which will represent 70% of the grade) and a final report (which will account for 30% of the final grade).

REFERENCES

Basic References:

Junqué C. y Barroso J. (2009). *Manual de Neuropsicología*. Madrid: Síntesis. ISBN 9788497566315.

Pérez García, M., Tirapu Ustárroz, J., & otros autores (2023). *Manual de Neuropsicología Clínica*. Ediciones Pirámide. ISBN 9788436822151.

Portellano, J. A. (2019). *Introducción a la Neuropsicología*. McGraw-Hill. ISBN 9788448197344.

Forn Frías, C. (2022). *Manual de Neuropsicología*. Pirámide. ISBN 9788436843286.

Brusco, L. I., & Sandra, S. (2015). *Manual de Neuropsicología*. Akadia. ISBN 9789875704466.

Supplementary References:



Kandel, E. R., Schwartz, J. H., Jessell, T. M., Siegelbaum, S. A., & Hudspeth, A. J. (2013). *Principios de Neurociencia*. McGraw-Hill. ISBN 9788448131744.

Ramachandran, V. S., & Blakeslee, S. (2012). *Fantasmas en el cerebro*. Editorial Paidós. ISBN 9788449327276.

Arnedo Montoro, M. (Ed.). (2014). *Neuropsicología a través de casos clínicos: evaluación y rehabilitación* (2ª ed.). Panamericana. ISBN 9788491107118.

Kolb, B., & Whishaw, I.Q. (2017). *Neuropsicología Humana*. Sanz y Torres. ISBN 9789500696784

Fuster, J.M. (2013). *Cerebro y libertad*. Ariel. ISBN 9788434423855.

Portellano, J.A. (2016). *Neuropsicología infantil*. Síntesis. ISBN 9788490772461.

León-Carrión, J. (2015). *Fundamentos de neuropsicología humana*. Síntesis. ISBN 9788490774960.

Pinel, J.P.J. (2017). *Biopsicología*. Pearson. ISBN 9788490355350.

Junqué i Plaja, C., & Barroso Ribal, J. (1999). *Neuropsicología*. Síntesis. ISBN 9788497566315

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