

# NEUROPSYCHOLOGICAL INTERVENTION AND REHABILITATION

Coordination: PEREIRA PRIEGO, CRISTINA

Academic year 2023-24

# Subject's general information

Subject name	NEUROPSYCHOLOGICAL INTERVENTION AND REHABILITATION					
Code	14804					
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION					
Typology	Degree		Course	Character	Modality	
	Double degree: Master in General Health Psychology and Master in Neuropsychology		2	COMPULSORY	Blended learning	
	Master's Degree in Neuropsychology		1	COMPULSORY	Blended learning	
Course number of credits (ECTS)	6					
Type of activity, credits, and groups	Activity type	PRAULA		TEORIA		
	Number of credits	1.4		4.6		
	Number of groups			1		
Coordination	PEREIRA PRIEGO, CRISTINA					
Department	PSYCHOLOGY, SOCIOLOGY AND SOCIAL WORK					
Important information on data processing	Consult this link for more information.					

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ARQUE FUSTE, GLORIA	gloria.arque@udl.cat	0	
GELONCH ROSINACH, OLGA	olga.gelonch@udl.cat	3	
MORA TOSQUELLA, ESTHER	esther.mora@udl.cat	1,4	
PEREIRA PRIEGO, CRISTINA	cristina.pereira@udl.cat	1,6	

## Learning objectives

After completing the course, the student is expected to be able to:

- Plan a neuropsychological intervention and rehabilitation taking into account the particular characteristics of each patient
- · Assess the possibility and effectiveness of interventions based on ICTs for each type of patient
- Efficiently search for scientific information that supports knowledge.
- · Critically analyze the scientific information found.

## Competences

#### **Basic Competences**

CB06 Own and understand the knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

CB07 Know how apply the acquired knowledge and to have the ability to solve problems in new or unfamiliar environments in broader (or multidisciplinary) contexts related to their area of study.

CB08 Be able to integrate knowledge and confront the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgment.

CB09 Know how to communicate their conclusions - and the latest knowledge and reasons that support them - to specialized and non-specialized audiences in a clear and unambiguous way.

CB10 Have the learning abilities that allow the students to continue studying in a way that will have to be very self - directed or autonomous.

#### **General Competences**

CG1 Search, analyze and use updated information on advances in neuropsychology through scientific literature, showing adequate critical thinking.

CG2 Formulate work hypotheses in research and in clinical practice in the field of neuropsychology applying the scientific method.

CG3 Apply the ethical and deontological foundations in the professional practice of neuropsychology.

CG5 Prepare oral and written communications, both scientific and clinical and informative, adapted to specific contexts on topics related to neuropsychology.

CG6 Ability to choose the best option to act according to each case, following a scientifically grounded systematic process and taking responsibility for the consequences of the typical decisions of the professional practice of neuropsychology.

#### **Específicas**

CE5 Design, apply and evaluate comprehensive neuropsychological rehabilitation plans adapted to the characteristics of the patients.

CE6 Use the appropriate technologies correctly for proper exploration, stimulation and / or neuropsychological rehabilitation.

# Subject contents

Restoration of neurocognitive functions diaschisis
ICTs in neuropsychological intervention and rehabilitation
Neuropsychological intervention and rehabilitation planning
Individual differences in neuropsychological intervention and rehabilitation

## Methodology

- 1. Class Master
- 2. Critical reading and analysis of documents
- 3. Discussion forums and discussion online
- 4. Preparation of reports / works
- 5. Case studies
- 6. Individual work
- 7. Practices

#### Development plan

This subject will be developed sequentially over the course of a month (4 weeks). It is composed of two blocks:

- Block 1: Intervention and neuropsychological rehabilitation in the adult population (first 2 weeks from 02/05/2024 to 02/18/2024). Professor Olga Gelonch.
- Block 2: Intervention and neuropsychological rehabilitation in children (the next 2 weeks from 19/02/2024 to 03/03/2024). Professor Esther Mora.

The theoretical content of the subject will be facilitated at the beginning of the subject. This will include study guides and/or bibliographic resources. Part of the bibliography that will be presented will be review and mandatory reading and another will be complementary bibliography, although recommended reading. The mandatory bibliography will be accessible online (open access) or will be available from the UdL library. The theoretical content that will be indicated as compulsory reading material will be evaluated through 2 online format test-type exams (an exam corresponding to Block 1 and another corresponding to Block 2). The exams will be taken through the "tests and quizzes" section of the virtual campus.

- Test type exam 1: corresponding to Block 1. It will be available to take from 9.00 a.m. on February 17, 2024 to 11:55 p.m. on February 20, 2024).
- Test type exam 2: corresponding to Block 2. It will be available to take from 9:00 a.m. on March 2, 2024 to 11:55 p.m. on March 5, 2024).

The student will have to carry out 2 learning activities during the course of the subject (the instructions and means of delivery of these activities are provided through the "Activities" section of the Virtual Campus):

- Learning activity corresponding to Block 1. Available from 9:00 a.m. on January 8, 2024. Maximum delivery date: February 19, 2024 at 11:55 p.m.
- Learning activity corresponding to Block 2. Available from 9:00 a.m. on January 22, 2024. Maximum delivery date: March 4, 2014 at 11:55 p.m.

There will be 4 face-to-face sessions that will take place on four Friday afternoons during the course of the subject, where the content will be deepened, learning activities will be worked on and practical activities will be carried out. The schedule will be from 4pm to 8pm.

- Face-to-face sessions Block 1. Dates: 9 and 16 February 2024
- Face-to-face sessions Block 2. Dates: February 23 and March 1, 2024

#### **Evaluation**

The evaluation of the subject is carried out through 3 types of evaluations:

- 1. Resolution of Cases 50%
  - Assessment Activity 1: Learning Activity Bloc Adults 25%
  - Assessment Activity 2: Children's Block learning activity 25%

This activity will be recoverable if not passed, with a maximum score of 8

- 2. Written test 40%
  - Assessment Activity 1: Online test-type exam (Adult Block) 20%
  - Assessment Activity 2: Online test-type exam (Children's Block) 20%

This activity will be recoverable if not passed, with a maximum score of 8

3. Practical activities in face-to-face sessions - 10%

To pass the subject, you must obtain a minimum score of 5 in the weighted average grade of the final grade. You must obtain a minimum score of 4 in Assessment 1 - Solving cases- and in Assessment 2 - Written Test-. In the event that the assessment grade is lower than 5 or the proportional average grade does not reach 5, the student will have to take a final assessment test in the exam period of the semester.

According to Law 2/2022 on university coexistence and the UdL Coexistence Regulations:

- 1. If there is deliberate copying or plagiarism, the assessment activity is withdrawn (if it is detected that there is more than 20% plagiarism through the plagiarism detection tool of the Virtual Campus /¡(urkund; if detects a chop, etc.), a report will be sent to the coordination of the degree and to the head of studies and a disciplinary file will be initiated.
- 2. If you spontaneously copy or plagiarize (speak in an exam, look at a colleague's exam...), proportionate measures will be applied (remove the activity, therefore it is suspended), in parallel a report will be sent to the coordination of the degree and to the head of studies. It will be assessed whether it is necessary to open a disciplinary file.

## Bibliography

#### **BLOCK 1. NEUROPSYCHOLOGICAL REHABILITATION IN ADULTS**

#### OBLIGATORY BIBLIOGRAPHY

- Paúl-Lapedriza, N., Bilbao-Bilbao, A & Ríos-Lago, M. (2008). Neuropsychological rehabilitation. In J. Tirapu Ustárroz (Ed), Manual of neuropsychology (p. 477-501). Barcelona: Viguera Editores.
   https://www.researchgate.net/publication/270822798 Rehabilitacion Neuropsicologica
- Bruna, O., Roig, T., Puyuelo, M., Junqué, C. and Ruano, A. (Eds). 2011. Neuropsychological rehabilitation. Intervention and clinical practice. Elsevier Masson. (Chapters 1, 2 and 3)
- Wilson. (2019). Neuropsychological rehabilitation: international manual. Editorial El Manual Moderno. (Part I. Chapters 1 – 5)

#### **COMPLEMENTARY**

- Wilson. (2019). Neuropsychological rehabilitation: international manual. Editorial El Manual Moderno. (Part III. Rehabilitation of cognitive disorders)
- Arango, C.C., Wilson, B., Olabarrieta, L. (2020). Principles of neuropsychological rehabilitation. Modern Manual.
- Muñoz, E., & Blázquez, J.L. (2009). Cognitive stimulation and neuropsychological rehabilitation. UOC Publishing.
- Cicerone, K. D., Dahlberg, C., Kalmar, K., Langenbahn, D. M., Malec, J. F., Bergquist, T. F., Felicetti, T., Giacino, J. T., Harley, J. P., Harrington, D. E., Herzog, J., Kneipp, S., Laatsch, L., & Morse, P. A. (2000). Evidence-based cognitive rehabilitation: recommendations for clinical practice. Archives of physical medicine and rehabilitation, 81(12), 1596–1615. https://doi.org/10.1053/apmr.2000.19240
  - https://www.academia.edu/82115158/Evidence\_based\_cognitive\_rehabilitation\_Recommendations\_for\_clinical\_practice
- Wilson, B., Salas, C.E., Auliffe M.M. (2020). General principles of neuropsychological rehabilitation. Cuadernos de Neuropsicología - Panamerican Journal of Neuropsychology, vol 14 (2), 59-70 https://www.cnps.cl/index.php/cnps/article/view/423
- Wilson, B. A. (2009). Neuropsychological Rehabilitation: Theory, Models, Therapy and Outcome. Cambridge University Press
- Wilson, B. A. (2010). Brain injury: recovery and rehabilitation. Wiley Interdisciplinary Reviews: Cognitive Science, 1(1), 108-118.

#### **BLOCK 2: NEUROPSYCHOLOGICAL REHABILITATION IN CHILDREN**

- Portellano, J. A. (2008). Child neuropsychology. Rehabilitation of childhood brain damage and dysfunction (p.p. 235-254). Madrid: Synthesis.
- Pardos Véglia, A (2019). Child neuropsychological intervention. Madrid: Synthesis
- Rosselli, M., Matute, E., Ardila, A. (2010). Neuropsychology of child development. Mexico: Manual Moderno.
- Ruiz Sánchez de León, J. M. (2016). Manual of pediatric neuropsychology. Madrid: ISEP.
- Onandia-Hinchado, I., and Del Olmo, A.F (2023). Child-adolescent Neuropsychology Manual. Madrid: Psara Editions.
- Dennis, M. (2000). Developmental plasticity in children: the role of biological risk, development, time, and reserve. Journal of communication disorders, 33(4), 321-332.
- Muñoz Céspedes, J. M., Tirapu Ustárroz, J. (2008). Neuropsychological rehabilitation. Madrid: Synthesis.
- Semrud-Clikeman, M. & Ellison, P. A. T. (2007). Child Neuropsychology: Assessment and Interventions for Neurodevelopmental Disorders. New York: Springer.
- Solovieva, Y. & Quintanar-Rojas, L. (2014). Principles and objectives for correction and development in child neuropsychology. Prevention and evaluation in psychology. México: Manual Moderno, 61-74.