Universitat de Lleida

DEGREE CURRICULUM

DESIGNS AND METHODS IN NEUROPSYCHOLOGICAL RESEARCH

Coordination: BLANCH PLANA, ANGEL

Academic year 2023-24

Subject's general information

Subject name	DESIGNS AND METHODS IN NEUROPSYCHOLOGICAL RESEARCH
Code	14805
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION

Typology	Degree	Course	Character	Modality
	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	1

Coordination	BLANCH PLANA, ANGEL
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	
BLANCH PLANA, ANGEL	angel.blanch@udl.cat	3	
NAVARRO GONZALEZ, DAVID		3	

Learning objectives

- Design a research in the field of neuropsychology.

- Analyze the data of the different neuropsychological evaluation techniques.

- Apply statistics for the analysis of neuropsychological data.

- Structure and write a research report according to international standards.

- Search effectively the scientific information that bases the knowledge.

- Critically analyze the scientific information found.

Competences

Basic Competences

CB06 To be able to understand the knowledge that enables creativity in the development or application of ideas, very often in a research context.
CB07 To be able to apply the knowledge that has been learnt and to have an adequate capacity to solve problems in new environments in different (and multidisciplinary) contexts related to the study area.
CB08 To be able to integrate knowledge and cope with the complexity of making judgements from an information which may be incomplete or limited, and which includes social and ethic responsability.
CB09 To be able to communicate conclusions and knowledge that the student has to a specialized and non specialized audiences.
CB10 To be able to have the learning skills that enable them to continue studying in an autonomous way.

General Competences
CG1 To be able to search, analize and use up to date information that is related to the latests advances in neuropsychology within scientific literature and using a critical way of thinking.
CG2 To be able to formulate hypotheses for research and clinical practice in the field of neuropsychology with the scientific method.
CG5 To be able to do oral and writen communications, both in the scientific and informative fields, adapted to specific subjects related to neuropsychology.
CG6 To be able to chose the best way to act depending on each case, following a systematic process which is fundamented in science.

Specific Competences

CE1 To be able to show a deep theoretical knowledge about the functioning of the brain and the bases of neuropsychology.
CE2 To be able to elaborate an neuropsychological exploration plan in order to do a correct diagnosis and a prognosis according to the evidence.
CE3 To be able to perform a neuropsychological exploration, adapted to the type of patient an according to the age and other relevant characteristics.
CE5 To be able to design, apply and evaluate integral plans of neuropsychological rehabilitation which are adapted to the characteristics of the patient.

Subject contents

1. Research process in neuropsychology;
2. Research designs;
3. Instruments and techniques for data collection;
4. Data organization and data analysis with R;
5. Presentation and communication of research outcomes;
6. Neuroinformatics;

Methodology

1. Online master classes

2. Critical reading and document analysis

3. Discussion forums and online colloquium

4. Preparation of reports / works

6.Oral exhibitions online.

7. Case studies

8. Individual work.

9.Practices

Automàtic translation:Information on the transmission and recording of personal data of teachers and students of the University of Lleida as a result of teaching in UdL facilities and at a distance
The University of Lleida informs that, depending on the changes to which it is obliged in accordance with the instructions of the health authorities, the provisions of the UdL or the assurance of the quality of teaching, it may transmit, record and use the image, voice or, where appropriate, the physical environment chosen by teachers and students, with the aim of teaching in UdL facilities or at a distance.
In turn, it encourages the people affected so that, in the case of distance teaching, they choose the spaces that have the least impact on their privacy.
And, in general, it is recommended to opt preferably for interactions in the chat or without activating the camera, when teaching activities are not carried out that, due to their characteristics, require an oral or visual interaction.
The person responsible for the registration and use of this personal data is the University of Lleida –UdL– (contact details of the representative: General Secretariat. Plaça de Víctor Siurana, 1, 25003 Lleida; sg@udl.cat; data contact details of the data protection delegate: dpd@udl.cat).
This personal data will be used exclusively for the purposes inherent in the teaching of the subject. In particular, the recording fulfills the following functions:
• Provide access to online content and, where appropriate, asynchronous training.
• Guarantee access to content for students who, due to technological, personal or health reasons, among others, have not been able to participate.
• Constitute a study material for the preparation of the evaluation.

Development plan

Nº	Formative activity	Hours allocated to the training activity (*)	Percentage of attendance
1.	Theory in person / online	20	100%
2.	Participation in online discussion forums	5	0%
3.	Case study	5	0%
4.	Face-to-face/on-line monitoring sessions	14	100%
5.	Oral presentations online / individual / group	2	100%
6.	Practices	14	100%
7.	Tutoring, advice and supervision of work and / or individual and / or group reports.	10	100%
8.	Reading and analysis of texts	20	0%
9.	Study and preparation of evaluation tests	40	0%
10.	Preparation of works and / or reports	20	0%
Total		150h	

Evaluation

1 Participation in virtual forums and debates 10%

2 Analysis of scientific documentation on a clinical case 10%

3 Preparation of works and / or reports 40%

4 Written tests 40%

Bibliography

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Carretié, L. (2001). *Psicofisiologia*. Madrid: Ediciones Pirámide.

Faraway, J. J. (2002). *Practical regression and Anova in R*: http: //wwwcranr-projectorg/doc/contrib/Faraway-PRA.pdf.

Maestú Unturbe, F., Ríos Lago, M., Cabestrero Alonso, R. (2008). *Neuroimagen. Técnicas y procesos cognitivos.* Elsevier Masson, Barcelona.

Onton, J., Westerfield, M., Townsend, J., & Makeig, S. (2006). Imaging human EEG dynamics using independent component analysis. *Neuroscience and Biobehavioral Reviews, 30*, 802-822.

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