

STUDENT GUIDE
MODULE:
NEUROPSYCHOLOGICAL REHABILITATION AND
COGNITIVE STIMULATION IN THE ALTERATIONS IN
ACQUIRED BRAIN INJURY

Coordinator:

Dra. Rocio Sánchez-Carrión
rsanchezcarrion@guttmann.com

UAB Code: 42194

Modality: mandatory

10 ECTS

Presential classes:

1st semester of the 2022-2023 academic year

From November 21th to 25th and from December 12th to 16th,
2022

Schedule: from 9 a.m. to 5 p.m. with one hour for lunch

Objective

This module will deepen the knowledge of cortical reorganization mechanisms in Acquired Brain Injury. Specific evaluation techniques and instruments. Analysis and design of personalized therapeutic strategies that allow the development of new capacities or functional recovery of the injured nervous system. Planning of programs of cognitive intervention in acquired brain injury and monitoring of results.

Competencies and learning outcomes

Competencies	Learning outcomes
CE1. Show that you understand current models and theories about the relationship between the central nervous system and cognitive abilities	<p>CE1.8. Identify the anatomical structures of attention and its functional integration in physiological and pathological conditions</p> <p>CE1.9. Identify the basic processes and subcomponents of care</p> <p>CE1.10. Analyze and explain the main theories of rehabilitation in the alterations of attention</p> <p>CE1.11. Recognize the anatomical structures of praxis and gnosi and their functional integration in physiological and pathological conditions</p> <p>CE1.12. Distinguish the differential neurobiological correlates of the organization of praxis and gnosi processes and their implications for rehabilitation</p> <p>CE1.13. Analyze and explain the main theories of rehabilitation of praxis and gnosi</p> <p>CE1.14. Differentiate the anatomical structures of language and its functional integration in physiological and pathological conditions</p> <p>CE1.15. Review and argue the differential neurobiological studies in the organization of language processes, their alterations and their implications for rehabilitation</p> <p>CE1.16. Define the main theories of language rehabilitation and its alterations</p> <p>CE1.17. Differentiate the anatomical structures of the executive functions and their functional integration in physiological and pathological conditions</p> <p>CE1.18. Review and argue the differential neurobiological studies of the organization of the processes of executive functions and their implications for rehabilitation</p>

	<p>CE1.19. Analyze and explain the main theories of rehabilitation of executive functions</p> <p>CE1.20. Identify the anatomical structures of memory and its functional integration in physiological and pathological conditions</p> <p>CE1.21. Analyze and explain the main theories of memory rehabilitation</p>
<p>CE2. Design therapeutic plans from the critical and analytical study of the profiles of neuropsychological affection that are obtained from administration of diagnostic assessment instruments and their interpretation of their results</p>	<p>CE2.8. Differentiate the profiles of psychometric and functional affection of the attentional alterations for the design of personalized therapeutic plans and oriented to autonomy in the activities of daily life</p> <p>CE2.9. Relate the new conceptual models with their integration in the therapeutic plans for the rehabilitation of care</p> <p>CE2.10. Manage and interpret diagnostic assessments of attention disorders</p> <p>CE2.11. Differentiate the profiles of psychometric and functional affection of the alterations of the praxis and gnosi for the design of personalized therapeutic plans and oriented to the autonomy in activities of the daily life</p> <p>CE2.12. Integrate the new conceptual models with therapeutic plans and oriented to the autonomy in the activities of the daily life</p> <p>CE2.13. Administrate and interpret diagnostic assessments of alterations of praxis and gnosi</p> <p>CE2.14. Differentiate the profiles of psychometric and functional affection of the language disorders and their alterations for the design of personalized therapeutic plans and oriented to autonomy in the activities of daily life</p> <p>CE2.15. Relate neurobiological trends and their integration with therapeutic plans in language rehabilitation</p> <p>CE2.16. Administrate and interpret diagnostic assessments of language disorders and their alterations</p> <p>CE2.17. Differentiate the profiles of psychometric and functional affection of the memory alterations for the design of personalized therapeutic plans and oriented to autonomy in the activities of daily life</p> <p>CE2.18. Manage and interpret diagnostic assessments of memory disorders</p>

	<p>CE2.19. Integrate neurobiological tendencies with therapeutic plans for the rehabilitation of memory</p> <p>CE2.20. Differentiate the profile of psychometric and functional affectation of the alterations of the executive functions for the design of personalized therapeutic plans and oriented to the autonomy in the activities of daily life</p> <p>CE2.21. Relate the new conceptual models and their integration with therapeutic plans in the rehabilitation of executive functions</p> <p>CE2.22. Manage and interpret the diagnostic assessments of alterations of higher functions</p>
CE3. Use current cognitive intervention strategies	<p>CE3.1. Select and program therapeutic strategies and intervention techniques for neuropsychological rehabilitation in attention disorders</p> <p>CE3.3. Describe and establish strategies and intervention techniques for the neuropsychological rehabilitation of praxis and gnosi</p> <p>CE3.4. Select and determine intervention strategies and techniques for the neuropsychological rehabilitation of language and its alterations</p> <p>CE3.6. Select and establish therapeutic strategies and intervention techniques for the neuropsychological rehabilitation of memory</p> <p>CE3.8. Recommend therapeutic strategies and intervention techniques for the neuropsychological rehabilitation of executive functions</p>

General / transversal competencies

- CGT1. Apply critical, logical and creative thinking at work
- CGT2. Demonstrate respect for diversity and ethical commitment
- CGT3. Work in multidisciplinary teams sharing knowledge in a responsible manner
- CGT5. Review and analyze the scientific literature
- CGT6. Incorporate work methodologies
- CGT7. Relate knowledge with professional practice
- CGT8. Demonstrate self-learning skills

Teaching methodology

The methodological approach of the module starts from considering the student as the protagonist of his teaching-learning process. The student must be active and autonomous throughout the process and the teacher gives support by providing the information and

resources necessary for the learning to take place.

The module is presential and the methodology in class is of presentations with audiovisual support, workshops, and group work. Through the platform e-learning-Guttman, the student has access, among others, the calendar and class schedules, bibliographic support documentation to maintain contact between the rest of the students and faculty, being able to initiate and / or participate in debates, share documents and information of interest to the group.

Formative activities	ECTS	Teaching-learning methodology	Competences
DIRECTED ACTIVITIES			
	2.8	Theoretical classes as ICT Simulation workshop	CE1, CE2, CE3 CT1, CT2
SUPERVISED ACTIVITIES			
	1.2	Seminars Practical application workshops Tutorial	CE2, CE3 CT3, CT6
AUTONOMOUS ACTIVITY			
	5.6	Reading of scientific texts / articles Writing of works Autonomous study	CE1, CE2, CE3 CT5, CT8
EVALUATION ACTIVITIES			
	0.4	Theoretical and practical tests	CE1, CE2, CE3 CT1, CT6, CT7

Competences evaluation

To show the level of mastery achieved in the acquisition and development of the module's competences, the evaluation process will be carried out continuously and will consist of the following activities:

- Multiple choice test week 1 (access will be activated at the end of the first week of the module): Test consisting of questions with four possible answers (options); where only one is correct. Constitutes 25% of the module grade
- Abstract of a scientific article (access will be activated during the first week of the module): The student must write an abstract in Catalan, Spanish or English of one of the two proposed articles. The abstract will have the following structure: 1) Objective, 2) Methodology, 3) Results and 4) Conclusions. The maximum length of the abstract will be 250 words. Constitutes 20% of the module grade.

- Multiple choice test week 2 (access will be activated at the end of the second week of the module): Test consisting of questions with four possible answers (options); where only one is correct. Constitutes 25% of the module grade
- Synthesis test (access will be activated at the end of the second week of the module). It will consist of two open questions: Open questions about the contents of the module that you will have to develop. To answer these questions, you must have attended class, as well as having reviewed the bibliography recommended by the teachers that has taught the subject. The maximum length of each of the answers cannot exceed two pages on one side only.

You Will find the evaluation criteria defined in the rubrics that Will be published on the teaching platform.

- Attendance to the classes will be considered. To have the right to take the exams, we ask for a minimum attendance of 80% of the module.
- The score scale is from 1 to 10, with 5 being the minimum grade to pass.
- If the student only present one or none of the three evidences of learning or you have not attended the minimum number of hours of programmed activities of the module (80%), the subject will be "not evaluable".

Programming of the evaluation activities

The evaluation tests will be delivered through the Guttman e-learning platform. Delivery times are as follows:

- Multiple choice test week 1: There will be 10 calendar days from the last day of class of the first theoretical week of the module.
- Multiple choice test week: There will be 10 calendar days from the last day of class of the second theoretical week of the module.
- Synthesis test: There will be 16 calendar days from the last day of class of the second theoretical week of the module.
- Abstract of a scientific article: It will be delivered together with the synthesis test (maximum 16 calendar days from the last day of the module class).

Qualification review process

If the student wants to review the exam, they can request it by email to the module coordinator (with copy to the teaching department).

Procedure and recovery criteria

Recovery is a process that will be put into operation once the period of publication of the module's final grades has ended.

You can choose if throughout the continuous evaluation you have made evidence with weight equal to or greater than 2/3 of the total score and you have obtained an average grade of the module between 3.5 and 4.9 points.

This will consist of a written test recovery of the evidence of learning in which you have not shown a satisfactory performance. Specifically, it will consist of a writing of a work (maximum 1.500 word, including bibliographical references) of a topic that will be determined by the module coordinator.

The maximum grade that can be obtained in the recovery is 5.

The module web

In the web of each module you Will find information of interest for the follow-up of the study:

- Forum of the module. Through this space you can keep in touch with the teachers or among the other students, to provide suggestions, answer questions, etc.
- News. It is the space from where you Will receive news and announcements about the evolution of the module.
- Programs. The module can be downloaded in PDF format, indicating the subjects, schedules and the teaching staff.
- Documentation. Here you Will find information and bibliography of interest that you can consult for the later study of the topics.
- Evaluation of competences. In this space you Will find all the necessary information and the delivery dates of the evaluation that will be done for this module

Satisfaction surveys

- Teacher evaluation. Daily, at the end of the classes, you Will receive an email (on your computer or on your mobile) that Will link you to a brief satisfaction questionnaire about the teachers that have taught that day. The objective of these surveys is to collect your opinion that will be a great help for the improvement of this module. The surveys are **anonymous**.
- Module evaluation. Also, at the end of the course you can answer the general evaluation survey of the module. The surveys are **anonymous**.

Coordination

For any aspect of the organization and planning of the module you can contact

Dra. Rocío Sánchez-Carrión

Doctor in Psychology

Specialist in Neuropsychology

Institut Guttman – UAB

E-mail: rsanchezcarrion@guttmann.com