

**COURSE DATA****Data Subject**

<b>Code</b>	35291
<b>Name</b>	Neurodegenerative Disorders
<b>Cycle</b>	Grade
<b>ECTS Credits</b>	6.0
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
1203 - Degree in Speech Therapy	Faculty of Psychology and Speech Therapy	2	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
1203 - Degree in Speech Therapy	18 - Neurodegenerative disorders	Obligatory

**Coordination**

<b>Name</b>	<b>Department</b>
GADEA DOMENECH, M.ENGRACIA	268 - Psychobiology

**SUMMARY**

The subject "Neurodegenerative Disorders" provide students / as basic and applied knowledge of neurodegenerative diseases that affect the central nervous system. This is a very topical issue given the amount of dementias diagnosed today and the impact that has on daily life in patients, especially in the field of language and other cognitive areas. This subject is connected with the basic stuff Studied first course "General Neurology and Neuropsychology and Language", in which the students have acquired the anatomophysiological and neuropsychological bases that enable them to understand the brain and cognitive consequences of various dementias both primary and secondary .

This course consists of a first part conceptual, classification and diagnostic criteria for dementia. In the second block the differential diagnosis of dementia will be discussed. The third will address the main primary degenerative dementia (of unknown origin and are the most prevalent). Finally, in the fourth block students / as deepen calls "secondary dementia", ie, dementia due to unknown causes and therefore potentially treatable such as vascular dementia. In all pathologies explicit reference will be made to the speech therapy consequences of these diseases. The aim of this module is that students are trained to know the brain basis of neurodegenerative diseases that they are based programs for "ad hoc" Speech therapy intervention.



## 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 advisable to have prior knowledge of the subject "Neurology and General neuropsychology and language" since it provides the neuroanatomical bases, neurophysiological and neuropsychological understanding its full extent the scope of the main disorders both primary dementia as secondary and its impact on language

## COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

### 1203 - Degree in Speech Therapy

- Students must be able to apply their knowledge to their work or vocation in a professional manner and have acquired the competences required for the preparation and defence of arguments and for problem solving in their field of study.
- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Explore, evaluate, diagnose and predict the evolution of communication and language disorders from a multidisciplinary perspective.
- Be familiar with communication, language, speech, hearing, voice and non-verbal communication disorders.
- Prepare and write reports of assessment, diagnosis, monitoring, completion of treatment and referral to another professional.
- Know the different neurodegenerative disorders associated with speech therapy.
- Be able to perform a neuropsychological assessment of a patient with a neurodegenerative disorder.
- Be able to produce a neuropsychological report to inform of an actual clinical case of a patient with a neurodegenerative disorder.

## LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)



Evaluate and diagnose differentially communication disturbances associated with different stages of dementia. Identify primary and secondary dementias and communication disorders associated with them.

## DESCRIPTION OF CONTENTS

### 1. Conceptual definition

Concept and classification of dementia

In this block the concept of dementia and their etiologic classification will be developed

Differential Diagnosis

Various diseases that share some characteristics with dementia and may lead to diagnostic error will be explained.

### 3. Neuropsychological tests and functional assessment of dementia

Neuropsychological Assessment of Dementia

Major and neuropsychological test batteries that assess dementia, emphasizing the field of language will be discussed.

Functional assessment of dementia

It will explain and analyze the main functional assessment scales for dementia.

### 4. Pharmacological and cognitive stimulation strategies

Pharmacological strategies

The main drugs used in the field of dementia will be discussed.

Strategies cognitive stimulation

Cognitive stimulation programs and their impact on the brain, functional and cognitive function of patients diagnosed with dementia will be discussed. Rating and cognitive stimulation of language.

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Classroom practices	15,00	100
Study and independent work	90,00	0
<b>TOTAL</b>	<b>150,00</b>	

**TEACHING METHODOLOGY**

- 1-Exhibitions and lectures with audiovisual support on major neurodegenerative diseases related to clinical speech therapy.
- 2-Practice management neuropsychological assessment with tests and test scales in neurodegenerative disorders, clinical case studies, conducting neurological assessments.
- 3-scheduled individual and group tutorials. Supervision of practical work, guidance and doubts.
- 4-Working student: preparation of papers, case analysis, report writing, preparation of the neurological assessment.
- 5-Study, preparation and conduct of the evaluation.
- 6-Using the Virtual Classroom to upload playlists (with links) supplementary classes videos.

**EVALUATION**

The evaluation is divided into two parts: a final evaluation (exam) and a continuous assessment (activities and assignments). To pass the course it is necessary to achieve 50% of the maximum grade for the course (100%). To pass the course it is necessary to deliver the activities and work in a timely manner.

For the calculation of the final grade (exam plus activities and assignments) it will be required to have obtained, at least, a grade of 4 (out of 10) in the exam.

The exam will be theoretical-practical, and will constitute 70% of the final grade. The level of theoretical knowledge acquired by the student will be evaluated through test questions of three alternatives, while the performance evaluation on the level of practical knowledge acquired by the student can be done through test questions or short questions that involve solving problems similar to those raised in the practical classes.

In addition, the final grade will include 30% for the assessment of activities and assignments that imply that the student has developed skills of knowledge, understanding and application of the contents of the subject. This percentage will include, on the one hand, 20% of assignments delivered throughout the course within the period established for each case, in the form of reports that may be individual and / or group, and on the other hand, 10% in the form of activities delivered in class at the end of the practical



sessions.

The works delivered at the end of the practical face-to-face sessions and the reports from group work will not be recoverable on second call. Honors will be delivered by regulations and based on the highest final grade. In the event of a tie, an additional evaluation could be conducted.

In the event of fraudulent practices, the Action Protocol for fraudulent practices at the University of Valencia will be applied (ACGUV 123/2020):

<https://www.uv.es/sgeneral/Protocols/C83.pdf>

## REFERENCES

### Basic

- Alberca Serrano, R. y López-Pousa, S. (2010). Enfermedad de Alzheimer y otras demencias. Ed. Médica Panamericana.
- Jurado, M.A., Mataró, M., Pueyo, R. (2013). Capítulo 1: Envejecimiento normal, deterioro cognitivo leve y demencia. Neuropsicología de las enfermedades neurodegenerativas. Editorial Síntesis, Madrid
- Junqué i Plaja, C., Bruna i Rabassa, O., Mataró i Serrat, M. (2003). Neuropsicología del Lenguaje: funcionamiento normal y patológico. Rehabilitación. Editorial Masson. Barcelona.
- Manual Teòric. Trastorns Neurodegeneratius. Grau de Logopèdia Gadea Doménech, Maria Engracia Disponible en: <http://roderic.uv.es/handle/10550/73738>

### Additional

- Alberca Serrano, R. (Editor). (1999). Demencias: diagnóstico y tratamiento. Editorial Masson. Barcelona.
- Devi, J. y Altimir, S. (2008). Consejos, estrategias y pautas para demencias y enfermedad de Alzheimer. Editorial ProusScience Thomson Reuters, Barcelona.
- Hodges, J. (2007). Frontotemporal dementia syndromes. Cambridge University Press.
- Navarro, J.F. y Espert, R. (1995). Neuropsicología: casos clínicos y pruebas razonadas de autoevaluación. Siglo XXI. Madrid.
- TIRAPU, J., RÍOS, M., MAESTÚ, F. (2011). Manual de Neuropsicología. (2ª edición). Viguera Editores. Barcelona.