

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

Code	35291
Name	Neurodegenerative Disorders
Cycle	Grade
ECTS Credits	6.0
Academic year	2021 - 2022

Study (s)

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

Subject-matter

Degree	Subject-matter	Character
1203 - Degree in Speech Therapy	18 - Neurodegenerative disorders	Obligatory

Coordination

Name	Department
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

OUTCOMES

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



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
TOTAL	150,00	

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.

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.

ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

1. CONTENTS



All the contents initially included in the teaching guide are maintained.

2. VOLUME OF WORK AND TIME PLANNING OF TEACHING

The same volume of work is maintained as in the teaching guide.

3. TEACHING METHODOLOGY

Substitution of the theoretical classroom by synchronous videoconference (task "Videoconference" through Blackboard Collaborate, Virtual Classroom). Practical classes in time and form according to the institutional calendar.

Tutorial system. The virtual tutoring program is maintained at 100%: attention in 48 working hours maximum by e-mail. In addition, 20% of face-to-face tutorials are available, so that, by appointment, they can be arranged in office 408 of the Faculty of Psychology.

4. EVALUATION

The evaluation is distributed in two parts: final individual evaluation (test) and continuous or progress evaluation (with activities performed in the classroom practice and individual and group work to perform autonomously).

The minimum requirements are maintained:

- In order to pass the course, 50% of the maximum grade of the course must be achieved.
- To pass the course it is necessary to deliver the work in time and form.

The rest of the evaluation is modified as follows:

(a) Hybrid teaching scenario: If the health situation does not change and the teaching is as initially planned (hybrid teaching and final exam), the evaluation of each section and its corresponding percentages will be done as follows:

Theoretical exam (40%)

The exam will evaluate the theoretical knowledge acquired, with an objective test of 3 alternatives, where the errors discount ($A - 1/2E$). For the calculation of the final grade it will be required to have obtained, at least, a grade of 4 (out of 10) in the exam. The performance test part on the level of practical knowledge is eliminated.



Papers (60%) The weighting of papers in the final grade is increased from 30% to 60%.

Report 1 (10%): Individual work, done in class in the practical sessions, which is delivered through the tool "Tasks" in "Virtual Classroom".

Report 2: (25%): Neuropsychological and speech therapy evaluation report (with the tools provided in the classroom practices) to an adult. A previous forecast will be made to check that the students do not have problems to do the work without infringing the health rules, and if not, to look for personalized solutions.

Report 3: (25%): Group work that implies that the student has developed skills of knowledge, understanding and application of the contents of the subject, and also that he has acquired the necessary skills to perform cooperative work. The group work will be presented and evaluated in the face-to-face practical classes.

(b) Online teaching scenario: If the health situation worsens and any form of face-to-face teaching is required (i.e., we move towards a completely online teaching and evaluation model), the evaluation of each section will be carried out by means of a virtual classroom, and following the guidelines dictated by the academic authorities. In this case, continuous evaluation will be promoted, and the relative weight of each task in the evaluation will be done in this way:

Exam (30%)

Works

Work 1: 10%

Work 2: 30%

Work 3: 30%

If on the day/time of the exam any student has difficulties (limitations in availability of equipment, connection errors...) he/she will have to write to his/her teacher an email using the account @alumni.uv.es, identifying and describing the difficulties, so that an alternative time can be communicated to him/her to proceed with the oral exam. Likewise, the teacher will indicate which tool will be used to make the connection, which can also be established by telephone using video-conference tools.

Video conference interviews may be required to verify participation in the tasks performed, individually or in groups. Declining this verification by the student will mean not passing the activity -individual or group- in question.

UV plagiarism detection systems will be used in the evaluation evidence. The manifest copy of any task or activity, whether individual or group, that serves for the purpose of evaluation in the subject, will make it impossible to pass the course.

5. BIBLIOGRAPHY



Both basic and complementary bibliographic references are maintained in the teaching guide.

A theoretical manual prepared by the teacher especially for the subject is added to the bibliography:

Manual Teòric. Neurodegenerative Disorders. Grau de Logopèdia Gadea Doménech, Maria Engracia

Available at: <http://roderic.uv.es/handle/10550/73738>