

**COURSE DATA****DATA SUBJECT**

Code: 35284
Name: Clinical Neurology Applied to Speech Therapy
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1203 - Degree in Speech Therapy	Facultat de Psicologia i Logopèdia	2	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1203 - Degree in Speech Therapy	Clinical neurology applied to speech therapy	COMPULSORY

COORDINATION

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LOPEZ CRUZ IAN

SUMMARY

The course Clinical Neurology Applied to Speech Therapy provides students with the essential knowledge of clinical neurology needed for their professional practice.

Neurology is the branch of medicine that focuses on the study of disorders of the nervous system, both central and peripheral. Many neurological conditions ¿particularly those affecting the central nervous system¿ can lead to language impairments, often accompanied by varying degrees of compromise in other brain functions, including cognitive, behavioral, motor, sensory, or autonomic functions.

This course offers an overview of the pathogenesis of neurological disorders by examining their mechanisms of involvement, clinical syndromes (i.e., clusters of signs and symptoms), and nosological entities (i.e., well-established correlations between clinical presentation and organic damage) that result in language impairment due to nervous system involvement. Many individuals with neurological conditions may benefit from the expertise of trained speech-language therapists, making it essential for professionals in this field to possess a foundational understanding of neurology.



Moreover, working within multidisciplinary teams, as is often the case in speech therapy, requires familiarity not only with terminology from other disciplines but also with their conceptual frameworks and approaches.

The course is closely related to many other subjects, sharing anatomical, physiological, clinical, and neuropsychological knowledge, among others. However, its specific focus lies in explaining, more than any other subject, the various ways in which the brain may be affected, the clinical syndromes that arise, and the underlying conditions responsible for such alterations.

With the knowledge gained in this course, students will be equipped to assess, diagnose, predict outcomes, rehabilitate, and prevent communication disorders caused by neurological damage. They will also be able to participate in the development, implementation, and evaluation of educational and healthcare programs for individuals with such conditions; adapt their professional practice, or that of others, to the presence of neurological disorders; and communicate effectively with the wide range of professionals involved in caring for patients with brain injuries.

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

1203 - Degree in Speech Therapy

Obligation to have previously passed the subject(s)

35274 - Neurology and Language Neuropsychology

COMPETENCES / LEARNING OUTCOMES

1203 - Degree in Speech Therapy

Design and conduct speech therapy treatments, both individual and collective, by setting targets and stages, with the most effective and adequate methods, techniques and resources, and bearing in mind the different life developmental stages as well as gender perspective.

Develop communication skills in the general population.

Explore, evaluate, diagnose and predict the evolution of communication and language disorders from a multidisciplinary perspective.

Know the limits of their field of activity and learn to identify when an interdisciplinary treatment is necessary.

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 be able to communicate information, ideas, problems and solutions to both expert and lay audiences.

Students must have acquired knowledge and understanding in a specific field of study, on the basis of general secondary education and at a level that includes mainly knowledge drawn from advanced



textbooks, but also some cutting-edge knowledge in their field of study.

Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.

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.

Understand and critically evaluate the terminology and research methodology of speech therapy.

DESCRIPTION OF CONTENTS

1. Generalities

Topic 1. Etiopathogenic and Semiological Bases in Neurology.

Topic 2. Neurological diagnostic tests and procedures.

Topic 3. Medical therapeutics in neurology.

2. Semiology of communication associated with disorders of motility and sensitivity.

Topic 4 . Speech therapy consequences of motor neuron diseases.

Topic 5 . Speech therapy semiology in cranial nerve disorders.

Topic 6 . Speech therapy semiology associated with hyperkinetic extrapyramidal diseases.

Topic 7 . Speech therapy semiology associated with hypokinetic extrapyramidal diseases.

Topic 8 . Speech therapy Implications in cerebellar semiology disorders.

Topic 9 . Speech therapy implications in neuropathies, myopathies and the neuromuscular junction disorders.

Topic 10 . Speech disorders of neurological cause: dysarthria

Topic 11 . Speech therapy semiology of higher functions and associated speech disorders: aphasia.

3. Medical conditions related to communication Communication

Topic 12. Communication Implications of Chromosomal Abnormalities and Genetic Diseases.

Topic 13. Language Consequences Associated with Congenital Malformations of the Central Nervous System and Brain Tumors.

Topic 14. Speech Therapy Implications in Cerebral Palsy.

Topic 15. Speech Therapy Implications of Dementia.

Topic 16. Speech Therapy Implications of Central Nervous System Infections.

Topic 17. Communication Symptoms Associated with Cerebrovascular Diseases: Ischemic Stroke.

Topic 18. Communication Symptoms Associated with Cerebrovascular Diseases: Hemorrhagic Stroke.



Topic 19. Communication Consequences of Traumatic Brain Injury.
Topic 20. Speech Therapy Implications of Epilepsy.
Topic 21. Speech Therapy Consequences of Demyelinating Diseases. Multiple sclerosis.
Topic 22. Speech therapy consequences of systemic diseases.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	45,00
Classroom practices	15,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	30,00
Independent study and work	20,00
Preparation of lessons	10,00
Preparation for assessment activities	20,00
Resolution of case studies	10,00
Total hours	90,00

TEACHING METHODOLOGY

Theoretical classes and presentation of content

Practical classes, seminars, and case studies.

Individual and group tutorials in which students will be supervised to ensure proper monitoring of their training activities.

Student study for the preparation and realization of the evaluation tests.

Student work: preparation of assignments, bibliographic research, case studies, report writing, etc.

EVALUATION

1. Theoretical-Practical Exam (70% of the overall course grade). Written exam. Retakeable in the second examination period.

It will consist of an exam with 35 questions, including two clinical cases. A minimum of 50% of the



maximum exam score is required to pass.

2. Continuous Evaluation (30% of the overall course grade).

2.1 Practical Activities (15% of the overall course grade): Attendance at a minimum of 4/5 practical sessions is required, and the corresponding assignments must be submitted and assessed.

2.2 Optional Activities (10% of the overall course grade): Group research projects, individual projects, and review exams, with a maximum of 10% of the grade, which will be retained in the second examination period.

2.3 Classroom activities assessed through tests at the end of each topic (5% of the overall course grade). These activities cannot be retaken in the second exam period.

To obtain Honors, a minimum grade of 9 out of 10 is required in the final course grade. In case of a tie, the higher grade on the theoretical-practical exam will be considered.

In cases of fraudulent practices, the procedures established in the Protocol for Action Against Fraudulent Practices at the University of Valencia (ACGUV 123/2020) will be followed: <https://www.uv.es/sgeneral/Protocolos/C83sp.pdf>

REFERENCES

Basic

- Webb W, Adler RK. (2010). Neurología para el logopeda (5ª ed). Editorial Elsevier, Madrid.
- Weiner WJ, Goetz CG, Shin RK, Lewis SL. (2010). Neurology for the non neurologist 6th edition, Editorial Lippincott.
- Adams y Victor: principios de neurología [2023]. McGraw-Hill Interamericana, México, D.F.
- Wilson-Pauwels, L., Akesson, E.J. y Stewart, P.A. (2021). Nervios Craneales. En la salud y la enfermedad. Paramericana.

Supplementary

- Vazquez Sánchez, F. y García López, B. (2023). Manual de Neurología para Terapia Ocupacional (2023). Paramericana.
- Martí-Massó J. (2011). Neurología para médicos de atención primaria. Editorial Ergon.
- Vinson B.(2011) Language disorders across the lifespan (3rd edition). Editorial Delmar.
- Totowa, NJ. Magnetic Resonance Neuroimaging. Methods and Protocols. Editorial Humana Press, 2011.