

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

Code	35284
Name	Clinical Neurology Applied to Speech Therapy
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	First term

Subject-matter

Degree	Subject-matter	Character
1203 - Degree in Speech Therapy	11 - Clinical neurology applied to speech therapy	Obligatory

Coordination

Name	Department
ORTIZ MASIA, MARIA DOLORES	30 - Biochemistry and Molecular Biology

SUMMARY

English version is not available

La asignatura de Neurología Clínica Aplicada a la Logopedia permite al alumno acceder a los conocimientos elementales de Neurología Clínica que necesita en su desempeño. La Neurología es la rama de la medicina que se ocupa del estudio de las enfermedades del sistema nervioso, tanto central como periférico. Un buen número de afecciones del sistema nervioso, especialmente las del sistema nervioso central, son capaces de producir alteraciones del lenguaje, comúnmente ligadas a algún grado de compromiso del resto de las funciones del cerebro, tanto cognitivas como conductuales, motoras, sensoriales o vegetativas. Esta asignatura proporciona información sobre la patogenia de los trastornos del sistema nervioso mediante la revisión de sus mecanismos de afectación, sobre los síndromes clínicos (conjuntos de signos y síntomas) y entidades nosológicas (correlaciones firmes entre apariencia clínica y alteración orgánica) que condicionan alteraciones del lenguaje por afectación del sistema nervioso. Un buen número de personas con algún tipo de afección del sistema nervioso son susceptibles de beneficiarse



del trabajo de una persona titulada en logopedia, siendo de este modo imprescindible un mínimo de conocimientos al respecto. Por si ello no fuera suficiente, las actuaciones en el contexto de equipos multidisciplinares en el que se da la práctica logopédica obligan al conocimiento no sólo de terminología de otras disciplinas sino de su propio conjunto de conceptos y abstracciones.

La asignatura mantiene relaciones con muchas otras asignaturas, compartiendo conocimientos anatómicos, fisiológicos, clínicos, neuropsicológicos y de otros tipos con numerosas otras asignaturas. No obstante, su interés radica en ser la asignatura que explica, más que otras, los distintos modos de afectación del cerebro, los síndromes clínicos o maneras en las que se muestra esta afectación y las entidades que producen estas afectaciones.

Con los conocimientos adquiridos en esta asignatura, el alumno podrá ser capaz de llegar a evaluar, diagnosticar, pronosticar, rehabilitar y prevenir trastornos de la comunicación humana cuya causa radique en una afectación cerebral, participar en elaboración, ejecución y evaluación de programas educativos o sanitarios dirigidos a personas con este tipo de alteraciones, comprender y adaptar su práctica o el diseño de la práctica de otros a la existencia de alteraciones del sistema nervioso y comunicarse correctamente con todo tipo de profesionales implicados en la atención a personas afectas por procesos que puedan dañar el cerebro.

PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

Having passed the subject "Neurology and General and Language Neuropsychology".

OUTCOMES

1203 - Degree in Speech Therapy

- 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 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.
- 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.
- Know the limits of their field of activity and learn to identify when an interdisciplinary treatment is necessary.
- Develop communication skills in the general population.
- Understand and critically evaluate the terminology and research methodology of speech therapy.
- Be familiar with labyrinthine semiology: hearing loss and its symptoms associated with otologic pathology.

LEARNING OUTCOMES

- To be able to differentiate between diagnoses of cases of neurological disorders of childhood: mental deficiency, infantile cerebral palsy and related disorders.
- To be able to interpret clinical data from other professionals in the evaluation of adult language disorders: acquired brain damage from traumatic, vascular, inflammatory, infectious and other causes.
- To be able to identify communication disorders in epilepsies and in neurological disorders of metabolic and degenerative origin.

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 alterations of the cranial pairs.
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 the cerebellar semiology disorders.
Topic 9 | Speech therapy implications in neuropathies, myopathies and the neuromuscular junction.



Topic 10 | Speech disorders of neurological cause: dysarthria.

3. Medical conditions related to communication

Communication

Topic 11| Language consequences associated with congenital CNS malformations.

Topic 12 | Communicative implications of chromosomopathies and genetic diseases.

Topic 13| Speech Therapy Implications in Cerebral Palsy.

Topic 14 | Speech therapy implications in dementias.

Topic 15 | Speech therapy Implications in Central Nervous System Infections.

Topic 16 | Symptoms of communication associated with cerebrovascular diseases: ischemic strokes.

Topic 17 | Symptoms of communication associated with cerebrovascular diseases: hemorrhagic stroke.

Topic 18 | Consequences in the area of communication in brain tumors.

Topic 19 | Consequences in the area of communication in traumatic brain injury.

Topic 20 | Speech therapy implications in epilepsy.

Topic 21 | Speech therapy consequences in demyelinating diseases. Multiple sclerosis.

Topic 22 | Speech therapy consequences in systemic diseases.

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Classroom practices	15,00	100
Development of group work	5,00	0
Development of individual work	5,00	0
Study and independent work	10,00	0
Readings supplementary material	5,00	0
Preparation of evaluation activities	25,00	0
Preparing lectures	10,00	0
Preparation of practical classes and problem	10,00	0
Resolution of case studies	5,00	0
Resolution of online questionnaires	5,00	0
TOTAL	140,00	

TEACHING METHODOLOGY

Individualized and group tutorials in which students will be supervised so that they can adequately monitor the training activities.



Study of the student for the preparation and realization of the evaluation tests.

Theoretical classes and exposition of contents; practical classes, seminars and case studies.

Student work: preparation of works, bibliographic consultations, case studies, preparation of reports, etc.).

EVALUATION

Minimum requirements

- To obtain 50% of the maximum mark of the theoretical-practical examination.
- Pass the practical assignments (points 2.1 and 2.2) of practical sessions.

Evaluation

1.-Theoretical-practical exam (40% of the overall mark of the subject). It will consist of two tests (theoretical and practical) recoverable in second call. To pass the exam both parts must be approved (theoretical and practical). Theoretical and practical are not compensable. The grade of each part (theoretical and practical) is kept until June of the same academic year.

1.1 Objective theoretical test using multiple choice questions. The maximum grade in this section will be **50%** of the overall grade of the subject.

1.2. A practical test that will consist of the resolution of two clinical cases where the semiology of the different language and speech disorders associated with brain injuries or diseases must be identified. This part of the test is considered to be exceeded with 50% of the maximum mark. The maximum grade in this section will be **20%** of the overall grade of the subject.

2- Continuous assessment (30% of the overall grade of the subject). It will consist of different tests not recoverable in second call. The notes in sections 2.1 and 2.2 are kept two academic years.

2.1 Group work of a research project and evaluation by the project partners (10% of the overall mark).

2.2 Physical recognition of a patient (15% of the overall mark of the subject).

2.3 Classroom activities evaluated by test at the end of the units (5% of the overall grade of the subject).

REFERENCES

Basic

- Webb W, Adler RK. (2010). Neurología para el logopeda. Editorial Elsevier-Masson.
- Weiner WJ, Goetz CG, Shin RK, Lewis SL. (2010). Neurology for the non neurologist 6th edition Editorial Lippincott.



Additional

- Martí-Massó J. (2011). Neurología para médicos de atención primaria. Editorial Ergon.
- Modo M, Bulte J. Magnetic Resonance Neuroimaging. Methods and Protocols. Editorial Humana Press, 2011
- Vinson B.(2011) Language disorders across the lifespan (3rd edition). Editorial Delmar.

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

The same as specified in the Teaching Guide.

2. WORKLOAD AND TIME PLANNING OF TEACHING

The same as specified in the Teaching Guide.

3. TEACHING METHODOLOGY

Theoretical classes (master-participation) will be online through the Blackboard application at the stipulated time (Wednesday and Thursday from 12:30-14:00h). The continuous evaluation activities will be carried out through the Virtual Classroom.

Presential practical classes (Mondays from 12:00-15:00h), if circumstances change and it is not possible to carry out presential activities, the practices will go online at the same time (Mondays from 12:00-15:00h) through the Blackboard application.

4. EVALUATION

The same form of evaluation specified in the Teaching Guide will be followed: 70% final evaluation and 30% continuous evaluation.

The final evaluation will be face-to-face, as long as the sanitary conditions allow it. If presence is not possible, the final evaluation will be carried out through the Virtual Classroom platform.

Continuous assessment activities will be carried out entirely through the Virtual Classroom application.

5. BIBLIOGRAPHY

The same as indicated in the Teacher's Guide.