

Physiotherapeutic Treatment in Neurology

Code: 102998
ECTS Credits: 6

2025/2026

Degree	Type	Year
Physiotherapy	OT	4

Contact

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

- Foundations in Neuroanatomy and Neurophysiology: A solid understanding of the anatomy and physiology of the nervous system, which is essential for interpreting the most common neurological pathologies in neurorhabilitation.
- Basic Physiotherapy Skills: Knowledge of and practical experience in fundamental physiotherapy techniques.
- Role of the Physiotherapist in Neurorehabilitation: Familiarity with the functions and responsibilities of the physiotherapist within the neurorehabilitation team.
- Physiotherapy in Neurology Coursework: It is highly recommended to have previously passed courses related to Physiotherapy in Neurology.

Objectives and Contextualisation

The objectives of the subject are:

- Lay the foundations of physiotherapeutic treatment in advanced neurology
- Deepen skills of complementary techniques applied in neurorehabilitation
- Develop clinical reasoning in neurorehabilitation for the approach of the neurological patient due to its potential complexity
- Know the different techniques of advanced neurological physiotherapy
- Practice the applicability of the different techniques of advanced neurological physiotherapy in simulated or real patients
- Learn about multidisciplinary teamwork in neurorehabilitation

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Design the physiotherapy intervention plan in accordance with the criteria of appropriateness, validity and efficiency.
- Display critical reasoning skills.

- Display knowledge of the morphology, physiology, pathology and conduct of both healthy and sick people, in the natural and social environment.
- Display knowledge of the physiotherapy methods, procedures and interventions in clinical therapeutics.
- Evaluate the functional state of the patient, considering the physical, psychological and social aspects.
- Integrate, through clinical experience, the ethical and professional values, knowledge, skills and attitudes of physiotherapy, in order to resolve specific clinical cases in the hospital and non-hospital environments, and primary and community care.
- Make a physiotherapy diagnosis applying internationally recognised norms and validation instruments.
- Make changes to methods and processes in the area of knowledge in order to provide innovative responses to society's needs and demands.
- Solve problems.
- Take sex- or gender-based inequalities into consideration when operating within one's own area of knowledge.
- Work in teams.

Learning Outcomes

1. Analyse a situation and identify its points for improvement.
2. Apply advanced physiotherapy methods and techniques to neurological pathologies..
3. Communicate using language that is not sexist.
4. Consider how gender stereotypes and roles impinge on the exercise of the profession.
5. Critically analyse the principles, values and procedures that govern the exercise of the profession.
6. Define the general and specific objectives of advanced physiotherapy treatment in neurological pathologies.
7. Describe and apply advanced evaluation procedures in physiotherapy in order to determine the degree of damage to the nervous system and possible functional repercussions.
8. Describe the circumstances that condition priorities in advanced physiotherapy treatment for neurological pathologies.
9. Display critical reasoning skills.
10. Enumerate the different types of material and equipment used in advanced physiotherapy treatment for neurological pathologies.
11. Enumerate the medico-surgical treatments, mainly in the area of physiotherapy and orthopaedics, that are used in neurological diseases.
12. Establish a diagnostic physiotherapy hypothesis based on complex clinical cases in neurological pathologies.
13. Explain in detail the physiopathology of neurological diseases and identify the symptoms that appear during the process.
14. Explain the explicit or implicit code of practice of one's own area of knowledge.
15. Identify situations in which a change or improvement is needed.
16. Identify the principal forms of sex- or gender-based inequality present in society.
17. Propose new methods or well-founded alternative solutions.
18. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
19. Solve complex clinical cases in the field of neurology.
20. Solve problems.
21. Weigh up the impact of any long- or short-term difficulty, harm or discrimination that could be caused to certain persons or groups by the actions or projects.
22. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.
23. Work in teams.

Content

THEORETICAL-PRACTICAL CONTENT:

All content will be taught in person by the teacher.

- Scientific bases of motor control and learning.
- Early intervention and neurologically critical patient.
- Review of the most useful manual techniques in neurorehabilitation.
- Frequent non-motor disorders in neurological patients with great influence on physiotherapy.
- Stability (core stability) and mobility in neurological patients.
- Treatment of postural control and balance.
- Correction of gait patterns.
- Treatment and functional approach of the upper limb.
- Treatment of sensory disorders and neuropathic pain.
- Virtual reality and mirror therapy.
- Constraint-induced movement therapy (CIMT).
- Other therapeutic techniques frequently used in current clinical practice Clinical case study

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
PRACTICAL LABORATORY WORK	30	1.2	19, 2, 9, 20, 23
THEORY	10	0.4	19, 2, 6, 7, 13, 9, 20, 23
Type: Supervised			
WORK PRESENTATIONS	2	0.08	19, 2, 6, 7, 8, 10, 11, 12, 13, 9, 23
Type: Autonomous			
elaboration of works and reports as well as research of information to share in classes	26	1.04	19, 2, 6, 7, 8, 10, 11, 12, 13, 9, 23
SELF STUDY	78	3.12	19, 2, 6, 8, 10, 9

There are theoretical and practical classes.

Theoretical classes:

- Presentation of the content by the teacher

Practical classes:

- Practice among students

- Study of real clinical cases in group

- Exhibition of research work by students

The practical classes are mandatory with a minimum attendance of 80%. During the practical classes a guide previously published in moodle will be followed but it is the students who are responsible for creating their own notes and conclusions of each practical class.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Narrative records/porfolios	10%	1	0.04	5, 3, 6, 7, 8, 10, 11, 13, 16, 9, 20, 23, 4, 21
Practical evaluation	50%	1	0.04	1, 19, 2, 6, 7, 8, 10, 12, 15, 22, 17, 9, 20
Theoretical evaluation	40%	2	0.08	19, 2, 6, 8, 10, 11, 13, 14, 18, 9, 20

This course DOES NOT offer a single evaluation option. The final grade will be based on a continuous assessment system that integrates various components:

1. Group Written Assignment (NT)

1. Description: Involves the submission and presentation of a written assignment completed in a group.
2. Weight: 10% of the final grade.

2. Practical Exam (NEP)

1. Description: This is a structured objective evaluation that simulates the resolution of a clinical case and the execution of a therapeutic plan. It's carried out in pairs, lasting 15 minutes. The following will be assessed:
 1. Manual dexterity in applying techniques.
 2. The appropriateness of the chosen technique/maneuver for the given situation.
 3. The planning and structuring of the approach.
 4. Patient management.
 5. Aspects related to the therapist's attitude and clinical reasoning.
2. Weight: 50% of the final grade.

3. Theoretical Exam (NET)

1. Description: A written assessment composed of:
 1. 20 multiple-choice questions: With 4 possible answers, only one of which is correct. Each correct answer is worth 0.35 points.
 2. 2 open-ended questions: Development questions, where each correct answer is worth 1 point.
 3. 3 short-answer questions: Each correct answer is worth 0.5 points.
2. Weight: 40% of the final grade.

Approval and "Not Evaluable" Criteria

To pass the course, it is essential to meet the minimum mandatory attendance and to complete all assessable tests.

The Final Grade will be calculated using the following formula:

$$\text{Final Grade} = (\text{NET} \times 0.40) + (\text{NEP} \times 0.50) + (\text{NT} \times 0.10)$$

The course will be passed with a Final Grade equal to or greater than 5.

Suppose a student cannot provide sufficient evaluation evidence (i.e., does not meet the minimum mandatory attendance or fails any of the evaluation tests). In that case, the course will be designated as NOT EVALUABLE.

Resit Examination

For the resit examination, the same continuous assessment system as in the regular call will apply:

- Theoretical Part: Will include questions about the content presented in class and about the topics of the submitted assignments.
- Practical Part: Will consist of the simulation of a clinical case resolution.

The review of the final grade in the resit will follow the same procedure as for continuous assessment.

Exchange Program Students

Exchange program students will be evaluated following the same criteria as regular UAB students.

Bibliography

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Software

- Moodle
- Microsoft teams
- Face-to-face theoretical classes
- Face-to-face practical classes

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	301	Catalan/Spanish	second semester	afternoon
(TE) Theory	301	Catalan/Spanish	second semester	afternoon

