

**Physiotherapeutic Evaluation and Diagnosis in
Neurology**

Code: 102997
ECTS Credits: 6

Degree	Type	Year	Semester
2500892 Physiotherapy	OT	4	1

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

Teachers

Inés Garcia Bouyssou

Prerequisites

It is recommended having acquired the skills and aims given on the subjects: Physiotherapy in Neurology I and II.

Objectives and Contextualisation

Deepen in the knowledge and training of the daily clinical and research skills related to the assessment and physiotherapeutic diagnosis in neurology, being able to:

- Make a medical history that allows:
 - Plan an individualized treatment for the neurological patient according to their evolutionary phase
 - Set short and long term goals
 - Assess the evolution
- Perform clinical reasoning appropriate to the patient's context.
- Perform a correct neurological examination.
- Understand the different mechanisms that allow motor control and the plasticity of the nervous system.
- Assess the main sensory and motor deficiencies, limitations in activity and restrictions on the participation of patients with neurological health conditions.
- Apply the most widely used standardized scales in neurology and gain the knowledge necessary to be able to build a scale in the field of neurorehabilitation.
- Get acquainted with the assessments made by other specialists within the Neurorehabilitation team.

- Use the necessary tools to conduct research in neurorehabilitation.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Display critical reasoning skills.
- 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 account of social, economic and environmental impacts when operating within one's own area of knowledge.
- 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. Communicate using language that is not sexist.
3. Consider how gender stereotypes and roles impinge on the exercise of the profession.
4. Critically analyse the principles, values and procedures that govern the exercise of the profession.
5. Describe and apply advanced evaluation procedures in physiotherapy in order to determine the degree of damage to the nervous system and possible functional repercussions.
6. Display critical reasoning skills.
7. Establish a diagnostic physiotherapy hypothesis based on complex clinical cases in neurological pathologies.
8. Explain the explicit or implicit code of practice of one's own area of knowledge.
9. Identify situations in which a change or improvement is needed.
10. Identify the principal forms of sex- or gender-based inequality present in society.
11. Identify the social, economic and environmental implications of academic and professional activities within one's own area of knowledge.
12. Propose new methods or well-founded alternative solutions.
13. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
14. Propose projects and actions that incorporate the gender perspective.
15. Propose viable projects and actions to boost social, economic and environmental benefits.
16. Propose ways to evaluate projects and actions for improving sustainability.
17. Solve complex clinical cases in the field of neurology.
18. Solve problems.
19. 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.
20. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.
21. Work in teams.

Content

1. CIF model and clinical history in neurological physiotherapy.
2. Exploration: general and health conditions.
3. Motor learning and neuroplasticity.
4. Assessment in physiotherapy of the adult neurological patient.
5. Standardized Scales.

6. Interdisciplinary assessment in neurorehabilitation.
7. Article Review.

Methodology

The teaching is based on theoretical and practical classes.

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.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
LABORATORY PRACTICES (PLAB)	20	0.8	17, 5, 7, 6, 18, 21
THEORY (TE)	21	0.84	17, 5, 7, 6, 18
Type: Supervised			
PRESENTATION / ORAL PRESENTATION PAPERS	2	0.08	5, 6, 18, 21
Type: Autonomous			
PERSONAL STUDY	60	2.4	17, 5, 7, 6, 18
READING ARTICLES / REPORTS OF INTEREST	25	1	17, 5, 7
WRITING PAPERS	18	0.72	17, 7, 6, 18

Assessment

The evaluation system will be:

- Written evaluation through objective tests of selection of multiple-choice items:
 - 2 exams one hour each.
 - 30 questions test with four possible answers, only one will be correct.
 - Each correct answer add 1 point and each wrong subtracts 0.25 points
 - *40% of the overall mark*
 - *no questions will be answered during the exam*
 - *the examination review date will be published on the virtual campus*
- Practical evaluation through objective structured assessment:
 - Practical application and reasoning of different rating scales.
 - Duration: 15 minutes.
 - *15% of the overall mark.*
- Oral evaluation through structured tests:
 - Oral presentation with audiovisual material of an neurological article using assessment scales applied in a clinical trial.

- Reasoning of the scales used and proposed other scales that could be used.
- Duration: 15 minutes
- *20% of the overall mark.*

- Delivery reports / written work:

- Drafting of a clinical record and planning treatment goals by observing a real clinical case.

- *25% of the overall mark.*

To pass the course must meet the following conditions:

- Pass every single part of the contents with a score ≥ 5 .
- Students who have not passed the subject/module through continuous assessment may take a recovery exam.
- Failure to comply with the instructions for preparing the work and the delivery deadlines entails a penalty in the note.
- It is compulsory to attend the practical classes. You may miss 30% of the classes though proof of reason for absence will be required.
- The following rules are considered in the guidelines to obtain a "not evaluable" qualification:
 - Not attending any of the assessment tests
 - Missing more than 30% of practical classes

The same evaluation criteria are applied for exchange students.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Narrative records/written works	10%	1.5	0.06	17, 2, 5, 7, 10, 14, 6, 18, 3
Oral assessment- structured tests	15%	0.25	0.01	4, 1, 2, 5, 7, 8, 11, 10, 9, 20, 16, 12, 13, 14, 15, 18, 21, 3, 19
Practical evaluation through objective structured assessment	35%	0.25	0.01	4, 2, 5, 8, 10, 16, 14, 6, 18, 3, 19
Written evaluation through objective tests of selection of multiple-choice items	40%	2	0.08	17, 7, 6, 18

Bibliography

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5. Fuller G. Exploración neurológica fácil. Elsevier 5ª ed. 2014.
6. M tui E, Gruener G, Dockery P. Neuroanatomía clínica y neurociencia. Elsevier 7ª Ed. 2017.
7. Swartz MH. Tratado de semiología. Anamnesis y exploración física. 7ªEd. Barcelona: Elsevier; 2014.
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10. Purves D. Neurociencia. 3ªEd. Madrid: Panamericana; 2008.

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15. Sheila Lennon, Maria Stokes. Pocketbook of Neurological Physiotherapy, 2009.

More literature in class.

Software

no specific software required