

## 2020/2021

# Physiotherapeutic Evaluation and Diagnosis in Neurology

Code: 102997 ECTS Credits: 6

Degree	Туре	Year	Semester
2500892 Physiotherapy	ОТ	4	0

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

#### 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 García 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

- Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
- Develop independent learning strategies
- 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.
- Solve problems.
- Work in teams.

## **Learning Outcomes**

- 1. Describe and apply advanced evaluation procedures in physiotherapy in order to determine the degree of damage to the nervous system and possible functional repercussions.
- 2. Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
- 3. Develop independent learning strategies
- Display critical reasoning skills.
- 5. Establish a diagnostic physiotherapy hypothesis based on complex clinical cases in neurological pathologies.
- 6. Solve complex clinical cases in the field of neurology.
- 7. Solve problems.
- 8. 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.

## **Activities**

Title	Hours ECTS		Learning Outcomes		
Type: Directed					
LABORATORY PRACTICES (PLAB)	20	0.8	6, 1, 5, 4, 7, 8		

THEORY (TE)	21	0.84	84 6, 1, 5, 4, 7		
Type: Supervised					
PRESENTATION / ORAL PRESENTATION PAPERS	2	0.08	1, 2, 4, 7, 8		
Type: Autonomous					
PERSONAL STUDY	60	2.4	6, 1, 3, 2, 5, 4, 7		
READING ARTICLES / REPORTS OF INTEREST	25	1	6, 1, 3, 2, 5		
WRITING PAPERS	18	0.72	6, 3, 5, 4, 7		

#### **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 vitrual campus
  - Practical evaluation through objective structured assessment:
- Practical application and reasoning of different rating scales.
  - Duration: 15 minutes.
  - 35% 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
  - 15% of the overall mark.
  - Delivery reports / written work:
- Drafting of a clinical record and planning treatment goals by observing a real clinical case.
  - 10% of the overallmark.

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
  ofreason 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	6, 3, 5, 4, 7
Oral assessment- structured tests	15%	0.25	0.01	1, 2, 8
Practical evaluation through objective structured assessment	35%	0.25	0.01	1, 2, 4, 7
Written evaluation through objective tests of selection of multiple-choice items	40%	2	0.08	6, 5, 4, 7

# **Bibliography**

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- 3. Cooper N v Frain J. ABC of ClinicalReasoning. BMJ Books: 2017.
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- 7. Swartz MH. Tratado de semiología. Anamnesis y exploración física. 7ªEd. Barcelona: Elsevier; 2014.
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- 13. Helm-Estabrooks, Albert. Manual de la afasia y de terapia de la afasia. Madrid: médica Panamericana, 2005.
- 14. Paeth, B. Experiencias con el Concepto Bobath: fundamentos, tratamientos y casos. 2ª ed. Madrid: Panamericana, 2006.
- 15. Sheila Lennon, Maria Stokes. Pocketbook of Neurological Physiotherapy, 2009.

More literature in class.