UAB
Universitat Autònoma de Barcelona

2023/2024

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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Teaching groups languages

You can check it through this link. To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Teachers

Eduard Badenas Fernandez

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 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. Propose new methods or well-founded alternative solutions.
12. Propose new ways to measure success or failure when implementing innovative proposals or ideas.
13. Solve complex clinical cases in the field of neurology.
14. Solve problems.
15. 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.
16. Weigh up the risks and opportunities of suggestions for improvement: one's own and those of others.
17. Work in teams.

Content

1. Clinical history in neurological physiotherapy: evaluation, exploration, recognition of deficits
2. CIF
3. Motor system

4. Sensitive system
5. Postural control and walk
6. Assessment scales
7. Functionality
8. Neuroplasticity
9. Pain
10. Planning of the objectives of tractament
11. Interdisciplinary assessment in neurorehabilitation

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			
SEMINAR (SEM)	17	0.68	13, 5, 7, 6, 14, 17
THEORY (TE)	18	0.72	13, 5, 7, 6, 14
clinical case seminar (SCC)	3	0.12	13, 2, 7, 8, 6, 14, 17
Type: Supervised			
PRESENTATION / ORAL PRESENTATION PAPERS	3	0.12	5, 6, 14, 17
Type: Autonomous			
PERSONAL STUDY	62	2.48	13, 5, 7, 6, 14
READING ARTICLES / REPORTS OF INTEREST	25	1	13, 5, 7
WRITING PAPERS	18	0.72	13, 7, 6, 14

Assessment

Single assessment

This subject does not provide the single assessment system

The evaluation system will be:

- Written assessment through objective tests of the selection of single-ch
o Test of 40 questions with 4 possible answers, only one will be correct
o Each correct answer is worth 1 point and each incorrect answer is wort
or 40% of the overall grade
o The note will be published on campus
o Exam review date will be published on campus
- Practical exam
o Simulation of a clinical case in pairs: one student will pretend to be a pa
o A lottery will be held to choose the clinical case to be simulated
o The physiotherapist must perform the neurological examination and the
- Delivery of subject portfolios
o The methodology will be explained in class and the operation will be pu
10% of the overall grade
- Practical and oral assessment
o Oral presentation with audiovisual material of a real clinical case
o Assessment and diagnosis in physiotherapy
o Use of rating scales (recreate their application)
o Relationship between observable deficits and results on the applied sc
o Planning treatment objectives
o Physiotherapy techniques
20% of the overall grade
To pass the subject, the following conditions must be met:
- Students who have not passed the subject/module through the assessn
continued they can take a recovery test.
- Not complying with the instructions for the preparation of the work and t
carries a penalty in the grade.
- Attendance at practical classes is mandatory. It is possible to miss 30%
classes presenting proof.
- The following are considered criteria for assigning the "non-evaluable" (
o Not appearing in any of the assessment tests
o Miss more than 30% of practicalclasses
Exchange students will follow the same evaluation criteria.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Group work oral presentation	20%	0.25	0.01	4, 1, 2, 5, 7, 8, 10, 9, 16, 11, 12, 14, 17, 3, 15
Narrative records/written works	10%	1.5	0.06	13, 2, 5, 7, 10, 6, 14, 3
Practical evaluation through objective structured assessment	30%	0.25	0.01	4, 2, 5, 8, 10, 6, 14, 3, 15
Written evaluation through objective tests of selection of multiple-choice items	40%	2	0.08	13, 7, 6, 14

Bibliography

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3. Cooper N y Frain J. ABC of ClinicalReasoning. BMJ Books: 2017.
4. Damasio A. La sensación de lo que ocurre. Cuerpo y emoción en la construcción de la conciencia. Barcelona: Planeta, 2018.
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.
8. García-Alix, Alfredo. Evaluación neurológica del recién nacido. Madrid: Díaz de Santos, 2010.
9. Redondo García A, Conejero Casares JA. Rehabilitación Infantil. 1ªEd. Madrid: Editorial Médica Panamericana, 2012.
10. Purves D. Neurociencia. 3ºEd. Madrid: Panamericana; 2008.
11. Seco. Sistema Nervioso. Métodos, fisioterapia clínica y afecciones para fisioterapeutas. Madrid: Panamericana, 2020.
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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.

Software

no specific sofware required