

25619 - Specific intervention methods in physiotherapy III

Información del Plan Docente

Academic Year	2017/18
Faculty / School	127 - Facultad de Ciencias de la Salud
Degree	275 - Degree in Physiotherapy
ECTS	6.0
Year	3
Semester	First Four-month period
Subject Type	Compulsory
Module	---

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

The subject is taught in the first semester of the academic year. During the course 2017-18, the different activities will be from 8 to 9:45 a.m. (Monday to Thursday).

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview

The learning process designed for this course is:

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Learning activity		Hours/ student	Hours/student/week
Master class		12.5	1
Seminars, practical class y activities for evaluation		47.5	3
Non face-to-face activities		90	

5.2.Learning tasks

Learning tasks of this course are:

- 1.1. Theoretical class /master class: using power point (ppt) as methodological support.
- 1.2. Seminars: using ppt, a practical-theoretical demonstration is made for each one of methods and techniques viewed at this course.
- 1.3. Practical class: After a progressive practical demonstration of the technique or method of neurological treatment, the student repeats the demonstration done.
- 1.4. Clinical case:With the help of bibliography, students individually or in small groups develop a physiotherapeutic intervention plan on a key topic
- 1.5. Mandatory or recommended bibliography:completes the personal study of the course.

5.3.Syllabus

THEORETICAL LECTURES

Lesson1. **Neuroplasticity** (3 hours)

How the brain reorganises after a stroke. How medulla reorganises after a partial or total lesion. Necessary conditions for an efficient plasticity. Abnormal postural tone and movement.

Lesson 2. Human movement related to central neurological lesions. (3.5 hours)

Lesson 3. **Bobath Concept** (2 hours)

Neurophysiological principles. Current theory. Basis of evaluation and treatment according Bobath Concept.

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Lesson 4. **Cognitive therapeutic exercise** (1 hour).

Neurophysiological principles. Hypothesis. Selections and design of tools and sessions using Perfetti method.

Lesson 5. **Proprioceptive Neuromuscular Facilitation** (1 hour) .

Neurophysiological principles. Mechanism and techniques.

Lesson 6. **Clinical neurodynamics** (1 hour) .

General neurodynamics. Assessment and mobilisation of neural structures.

Lesson 7. **Motor control** (1 hour)

Neurophysiological principles. Key aspects for treatment.

SEMINARS

Seminar 1. **Treatment of balance perturbations** (4 hours). Notions about posture. Dizziness and balance perturbations. Reeducation of peripheral dizziness.

Seminar 2. **Swallowing disturbances** (3.5 hours). Description of swallowing problems. Physical treatment of dysphagia.

Seminar 3. **Body weight support treadmill** for incomplete medullar lesions. (2 hours)

Seminar 4. **Motor control** (1 hours).

Seminar 5. **Mirror therapy** (1 hour).

Seminar 6. **Dual task and Neurocognitive problems** (2 hours).

PRACTICAL LECTURES

Session 1. **How to transfer a neurological patient. Specific bed and chair position** (4 hours).

Session 2. **Human movement analysis for evaluating and treating a neurological patient** . (4 hours)

Session 3. **Bobath Concept** (8 hours) .

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Alignment of key points. Postural adjustments in trunk. Limb treatment. Walking.

Session 4. **Cognitive therapeutic exercise** (2 hours).

Sets of equipment and design of exercises of different degrees of difficulty.

Session 5. **Proprioceptive Neuromuscular Facilitation** (8 hours) .

Diagonal PNF patterns and joints. Techniques. Transferences.

Session6. **Clinical neurodynamics** (4 hours) .

Specific assessment, clinical reasoning and treatment.

Session 7. **Dry needling** (2 hours).

Trigger point treatment to reduce tone and pain.

Session 8. **Neuromuscular** bandage. Applied to modulate muscular tone (2 hours)

5.4.Course planning and calendar

5.5.Bibliography and recommended resources