

25619 - Specific intervention methods in physiotherapy III

Información del Plan Docente

Academic Year 2016/17

Academic center 127 - Facultad de Ciencias de la Salud

Degree 275 - Degree in Physiotherapy

ECTS 6.0 **Course** 3

Period First Four-month period

Subject Type Compulsory

Module ---

- 1.Basic info
- 1.1.Recommendations to take this course
- 1.2. Activities and key dates for the course
- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2. Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources
- 5.1.General methodological presentation
- 5.2.Learning activities
- 5.3.Program

THEORICAL LECTURES

Lesson1. Neuroplasticity (3 hours)



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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 mouvement.

Lesson 2. Human mouvement 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.

Lesson 4. Cognitive therapeutic exercise (1 hour).

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

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).

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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) .

Alingment of key points. Postural adjusments 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. Planning and scheduling

5.5.Bibliography and recomended resources