

Academic Year/course: 2021/22

## 25655 - Physiotherapy in Neurology

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 25655 - Physiotherapy in Neurology

**Faculty / School:** 127 - Facultad de Ciencias de la Salud

**Degree:** 605 - Degree in Physiotherapy

**ECTS:** 6.0

**Year:** 3

**Semester:** Second semester

**Subject Type:** Compulsory

**Module:**

### 1. General information

### 2. Learning goals

### 3. Assessment (1st and 2nd call)

### 4. Methodology, learning tasks, syllabus and resources

#### 4.1. Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives and competencies, combining active participation of the student in the theoretical sessions, focused on the basic physical therapy performance on neurology, and the practical lessons. On the other hand, the subject focuses on the personal activity of the student carrying out the different physical therapy processes in the evaluation and global treatment of the neurological patient.

Particularly, the student should develop a personal searching on the physical therapy performance based on a analysis and study that allows to go through the knowledge of the problem and to provide structure to the physical therapy performance.

Students are expected to participate actively in the class throughout the semester.

Classroom materials will be available via Moodle. These include a repository of the lecture notes used in class, the course syllabus, as well as other course-specific learning materials.

Further information regarding the course will be provided on the first day of class.

#### 4.2. Learning tasks

The proposed program to achieve the results comprises the following activities:

- Lectures: 10 hours.
- Clinical Seminars: 5 hours.
- Practice sessions: 45 hours.
- Group assignment and autonomous work.

### 4.3. Syllabus

The course will address the following topics:

#### PHYSICAL THERAPY EVALUATION OF THE NERVOUS SYSTEM

- Mechanosensibility and Physiology of the Peripheral Nervous System
- Motor, sensitive and cognitive evaluation of the Central Nervous System
- Neuropathic pain evaluation
- Muscle tone evaluation and treatment
- Balance, Coordination and Functional capacity evaluation and treatment

#### EVALUATION AND TREATMENT OF PATHOLOGIES RELATED WITH THE PERIPHERAL AND CENTRAL NERVOUS SYSTEM

##### PERIPHERAL NERVOUS INJURIES

- Seddon classification
- Sensitive recovery evaluation
- Motor dysfunction treatment
- Sensitive dysfunction treatment
- Vegetative dysfunction treatment
- Orthopedic prevention

##### COMPRESSION SYNDROMES

- Nervous compression and tension
- Upper quadrant syndromes
- Lower quadrant syndromes
- Clinical stages according to mechanosensitivity and physiology
- Symptoms, neurodynamics and neural interface treatment
- Sensibility treatment
- Motor dysfunction treatment
- Proper use of complementary tests and derivation scenarios

##### FACIAL PALSY

- Facial palsy
- Physical therapy evaluation and treatment

##### HEADACHE

- Indication and contraindication of physical therapy management
- Physical therapy evaluation and treatment

##### CEREBROVASCULAR ACCIDENT (CVA) or STROKE

- Type of Stroke
- Stroke Units
- Neuroplasticity
- Assessment scales for stroke
- Physical therapy treatment

##### PARKINSON DISEASE

- Physical therapy evaluation in Parkinson disease
- Treatment: Specific objectives and phases

##### MEDULAR INJURY

- Clinical aspects
- Physical therapy evaluation. Scales
- General objectives
- Physical therapy treatment according to objectives and phases

##### MISCELLANY

- AMYOTROPHIC LATERAL SCLEROSIS
- MULTIPLE SCLEROSIS
- GUILLIAM-BARRE SYNDROME
- BRAIN DAMAGE

#### **4.4. Course planning and calendar**

##### **Presential sessions and assignment calendar**

This subject has a compulsory consideration. The subject is taught in the second semester of the Third course of the Physiotherapy Degree at University of Zaragoza (15 teaching weeks)

It has a duration of 6 credits, developed according to the following teaching activities:

- Theoretical lessons
- Seminars and practical clinical cases

The date of evaluation of the theoretical and practical content and the final assignment of the subject is related to the assigned calendar for June and September exams.

The different presential activities will be carried out in the Faculty of Health Sciences that will be informed in the beginning of the academical course in the official information point of the faculty.

#### **4.5. Bibliography and recommended resources**

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25655>