

Academic Year/course: 2022/23

25655 - Physiotherapy in Neurology

Syllabus Information

Academic Year: 2022/23

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

1.1. Aims of the course

The course and its expected results respond to the following approaches and objectives:

- ? Perform neurological physiotherapy assessment.
- ? Determine the objectives of the physiotherapy intervention in neurology.
- ? Design physiotherapy action plans in the field of neurology.
- ? Determine the procedures and methods in the neurological physiotherapy intervention.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the results of subject?learning provides training and competences to contribute to some extent to the achievement of objectives 3: health and well-being;

1.2. Context and importance of this course in the degree

Learning outcomes of this subject are very relevant because enable allows the acquisition of the necessary competencies to plan, develop and evaluate the physiotherapy intervention plan in people with a neurological process. This subject is taken up after other subjects as Fundamentals of Physiotherapy, Assessment and Diagnosis in Physiotherapy, Physiotherapy Methods and Medical-Surgical Conditions.

1.3. Recommendations to take this course

Before starting the course, it is highly recommended to review the knowledge previously acquired in relation to the areas of ??neurology in the courses: Human Anatomy I, Human Anatomy II, Human Physiology and Medical-Surgical Conditions.

2. Learning goals

2.1. Competences

Transversal competences:

- ? Capacity for analysis and synthesis.
- ? Ability to manage information.

Specific competences:

a) Of knowledge:

- ? The physiological, structural, functional and behavioral changes that occur as a result of the application of physiotherapy.
- ? The Physiotherapy Procedures based on specific Methods and Techniques of physiotherapeutic actions to be applied in the different pathologies of the devices and systems in the specialties of medicine and surgery, included in the contents, as well as in the promotion and conservation of health, and in disease prevention.
- ? Research and evaluation methodologies that allow the integration of theoretical perspectives and research experiences in the design and implementation of effective physiotherapy.

- ? Theories that support problem-solving ability and clinical reasoning.
- ? The implications of organizational arrangements and work models.
- ? Criteria and indicators that guarantee quality in the provision of physiotherapy services, through the use of good clinical practice guidelines and professional standards.

Professional competences:

- ? Examine and assess the functional status of the patient/user.
- ? Provide effective and comprehensive care.
- ? Participation in health promotion and disease prevention.
- ? Interact effectively with the interdisciplinary team and in relation to the pathology treated.
- ? Incorporate clinical research and evidence-based practice as a professional culture.
- ? Develop the teaching function, as part of professional practice.
- ? Keep knowledge, skills and attitudes updated.
- ? Guarantee the quality in Physiotherapy practice.

Attitudinal competences:

- ? To know and respect the limits of the professional competences.
- ? Show respect, appreciation and sensitivity to the work of others.
- ? Be discreet, using the information available appropriately, preserving the patient's dignity.
- ? Work responsibly, which means being able to carry out the activities of the job, without the need for strict supervision.
- ? Consider the user or patient as the axis around which intervention decisions revolve, taking into account their objectives and needs.

2.2. Learning goals

The student, to pass this course, must demonstrate the following results:

- Being able to carry out the diagnosis of physiotherapy in clinical processes through the completion of the clinical history and the evaluation of the functional status of the patient.
- Differentiate the objectives of physiotherapy action in neurological processes in their different phases of evolution.
- Being able to explain and reasonably select, based on scientific evidence, the appropriate physiotherapy treatment with respect to the established therapeutic objectives.
- Differentiate the moments of application of different procedures, according to the evolution of the neurological process.
- Being able to apply a physiotherapy intervention plan adapted to the physiotherapy diagnosis and to re-evaluate the results.

2.3. Importance of learning goals

To obtain knowledge about consequences caused by an alteration or disease of the nervous system in terms of health, social conditions and dependency. This allows us to place physiotherapy in the current and future context. The need to develop integrated teams in an interdisciplinary manner and with specialization in dealing with these neurological problems.

3. Assessment (1st and 2nd call)

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

Student must demonstrate that they have achieved the expected learning outcomes through the following assessment activities:

1. **Written exam:** 50% of the final evaluation. It is an objective test with multiple choice questions about the theoretical-practical contents and seminars of the course. It also includes a written development about a clinical case, in which is developed a physiotherapeutic action related to the content of the course.
 2. **Evaluation of the practical laboratory sessions:** 20% of the final grade. The evaluation method will be indicated on the day of presentation of the course.
 3. **Group work:** carried out in groups, on the development of the physiotherapy process of any of the diagnoses addressed in the theoretical-practical program and/or seminars. This group work will be done through a practical demonstration. It will mean 30% of the final grade.
 4. **Evaluation for students who have not attended 80% of the practices and the resolution of problems and cases.** They had to pass a written exam on the concepts developed in the theoretical-practical classes and on the problems and cases, and a practical exam on the practical content of the subject.
- In order to pass the course, student must obtain at least 5 points (out of 10) in each of the aforementioned evaluation activities. Failure to pass any of the parts (activities) will mean the need to pass the activity in successive calls. If the passing of the written exam is pending, only the rest of the grades passed during the following academic year will be saved.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process that has been designed for this subject is based on the following:
The acquisition of knowledge and acquisition of skills, combining the student's participation in the theoretical presentations, which focus the baseline of physiotherapeutic action in neurology, with the practical sessions.
On the other hand, the personal activity of the student, carrying out the search for different physiotherapy processes and updates in the assessment and global treatment of the neurological patient in its different manifestations.
In particular, develop the personal search for physiotherapy action in carrying out analysis and study work, which allows deepening the knowledge of the problem and structuring the way of presenting and arguing this type of activity.
Students are expected to actively participate in class throughout the course. The teaching material will be available in Moodle, as well as resources that the teachers consider appropriate to delve into the content of the subject. In addition, the student must take their own notes, as well as complement the material given by the teachers as part of their autonomous work. Additional information will be provided to this guide on the day of presentation of the subject.

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

Physiotherapy in Acquired Brain Damage
Physiotherapy in Spinal Cord Injury
Physiotherapy in Parkinson's disease
Physiotherapy in pain
Physiotherapy for headaches
Physiotherapy in peripheral neuropathies of the upper and lower extremities
Vestibular physiotherapy
Physiotherapy in Multiple Sclerosis and Amyotrophic Lateral Sclerosis
Physiotherapy in other neurological origin movement disorders

4.4. Course planning and 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

It has a duration of 6 European Credit Transfer System (ECTS), developed according to the following teaching activities:

- Theoretical lessons
- Seminars, practices and clinical cases

The schedules of the Degree in Physiotherapy are published on the website fcs.unizar.es and are made known at the time of presentation of the course.

1st call: May 22, 2023

2nd call: July 3, 2023

4.5. Bibliography and recommended resources

The basic and complementary bibliography books can be consulted at:

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

Papers and other links of interest will be indicated in the Moodle of the subject. Some may be required reading.