Universidad Zaragoza

Academic Year/course: 2022/23

25659 - Physiotherapy Methods in Cardiorespiratoric Disorders

Syllabus Information

Academic Year: 2022/23
Subject: 25659 - Physiotherapy Methods in Cardiorespiratoric Disorders
Faculty / School: 127 - Facultad de Ciencias de la Salud
Degree: 605 - Degree in Physiotherapy
ECTS: 6.0
Year: 3
Semester: First semester
Subject Type: Compulsory
Module:

1. General information

1.1. Aims of the course

The aim of this subject is that the student, based on knowledge of its contents, be able to explain and apply the theoretical and

methodological foundations of the different physiotherapy techniques and procedures, in the respiratory and cardiovascular processes, within

the field of physiotherapy. Through the use of the different specific procedures or through the different techniques, the student should know

apply them both in the respiratory processes and in the cardiovascular processes

1.2. Context and importance of this course in the degree

This subject is related to subjects such as General Pathology in the field of Physiotherapy taught in
first course, and with Medical-Surgical Conditions taught in the second course and with Physiotherapy in Respiratory and Cardiology, the latter taught in the third course of the degree in Physiotherapy.
It is a basic subject of the first quarter of the third course in which some of the specific methods of intervention in physiotherapy are addressed, whose clinical application will be addressed in the subject.
Its meaning is dual: it aims to introduce the student to the scientific/technical knowledge of the profession and, on the other hand, aims to bring together certain skills with the subjects mentioned.

1.3. Recommendations to take this course

The theoretical contents that introduce the physiotherapy techniques to be developed in the subject, constitute a necessary foundation for the correct application of this techniques in the different fields and physiotherapy specialties that are offered in the present subject: Respiratory Physiotherapy and Cardiovascular Physiotherapy
Likewise, this theoretical part proves necessary for the understanding of the pathomechanical mechanisms and physiological factors that concur in respiratory and cardiovascular pathological processes.
In a subject such as this one, in which the load of practical credits is preponderant, the student is required to have a high level of commitment to the practical modules, a key moment to capture and develop the
knowledge acquired in the theoretical part. For this reason, compulsory attendance at these
practical content.

2. Learning goals

2.1. Competences

General Competencies

CG03 - Know and understand physiotherapeutic methods, procedures and actions, aimed both at the actual therapy to be applied in the clinic for re-education or functional recovery, and at carrying out activities aimed at promoting and maintaining health.

CG09 - Evaluate the evolution of the results obtained with the treatment in relation to the objectives set.

CG13 - Know how to work in professional teams as a basic unit in which the professionals and other staff of care organizations are structured in a uni or multidisciplinary and interdisciplinary way.

CG17 - Understand the importance of updating the knowledge, abilities, skills and attitudes that make up the professional skills of the Physiotherapist.

CG19 - Communicate effectively and clearly, both orally and in writing, with users of the health system as well as with other professionals.

Specific Competencies

CE09 - Know the physiological and structural changes that can occur as a result of the application of physiotherapy.

CE12 - Identify the changes produced as a consequence of the physiotherapy intervention.

CE13 - Promote the participation of the user and family in their recovery process.

CE17 - Know and apply the theoretical bases and the development of physiotherapy methods and procedures.

CE22 - Promote the participation of the user and family in their recovery process.

CE23 - Identify the most appropriate physiotherapy treatment in the different processes of alteration, prevention and promotion of health as well as in the processes of growth and development.

CE28 - Understand and carry out the specific methods and techniques related to the respiratory system and the cardiocirculatory system.

CE31 - Analyse, program and apply movement as a therapeutic measure, promoting the participation of the patient/user in the process.

CE33 - Promote healthy lifestyle habits through health education.

CE37 - Know and apply the mechanisms of quality in the practice of physiotherapy, adjusting to the criteria, indicators and quality standards recognized and validated for proper professional practice.

Transversal Competences

CT01 - Ability to apply critical reasoning

CT02 - Capacity for analysis and synthesis

CT03 - Ability to assume ethical commitment

CT05 - Ability to work based on quality criteria

CT06 - Ability to develop creativity

CT07 - Ability to develop initiatives and entrepreneurial spirit

CT09 - Ability to plan and evaluate

CT10 - Ability to properly use computer media and new technologies

CT12 - Ability to develop information management skills

CT13 - Capacity for criticism and self-criticism

2.2. Learning goals

To pass this subject, the student must demonstrate the following results:

1. Knows and discriminates between restrictive and obstructive respiratory pathologies.

2. Is able to guide the corresponding techniques for each of the respiratory conditions.

3. Correctly applies the passive techniques of Respiratory Physiotherapy and conducts and controls the execution of the active techniques of Respiratory Physiotherapy.

4. Is able to describe, prescribe and apply the main physiotherapeutic intervention methods in the prevention and treatment of vascular and lymphatic dysfunctions and coronary ischemic syndrome.

2.3. Importance of learning goals

They will allow the student to be more prepared to understand the theoretical and methodological foundations of

Physiotherapy in specific fields such as alterations in respiratory function and cardiovascular function, with a bio-psycho-social view of the human being and therefore, to be better able to start in the reasoned planning of the profesional action in various pathological or injury situations.

3. Assessment (1st and 2nd call)

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

The student must demonstrate that they have achieved the expected learning outcomes through the following assessment activities.
Follow-up evaluation of internships:
Compulsory attendance and active and efficient participation in practical classes, evaluated with a mandatory system for access the official final exam: the student must demonstrate that knows how to apply the theoretical bases of the subject in the resolution of questions or practical assumptions, with a precise, clear and argued language.
To pass this evaluation, the student must attend at least 80% of the practical classes, as well as obtain a minimum of 4 out of 10 in the oral exam.
Oral practical exam once the practical classes have finished. The exam will consist of performing one of the techniques developed in the practical classes or a simple clinical assumption to develop.
Evaluation of the theoretical contents. Written exams:
Optional: Exam at the end of the teaching of the subject.
Final theory exam for the entire subject in the official call.
These written tests will consist of 5 short questions valued at 2 points each. Possibility of making a long question and 5 short questions with the following valuation: Long question: 5 points and 5 short questions: 5 points.
The duration of the time for the exams will be between one hour and one hour and a half.
An oral exam will be allowed if someone expressly requests it.
The answers to the short questions must adhere to the precise and complete explanation of the concepts and contents indicated in the statement. The answers to the long question, in addition to including what is indicated for the questions short, they must express in a coherent and organized way a field of knowledge of a specific part of the course.
Group work of the subject:
Presentation of a group work, which will be presented through oral presentation. Presentation, originality, own intervention, mastery of the matter and state of the matter of the chosen topic.
The theme will be based on the theoretical-practical contents of the subject: Physiotherapy approach in specific respiratory diseases, Physiotherapy approach in specific cardiovascular pathologies or select a clinical case developing a Physiotherapy clinical history model.
The student must demonstrate that knows how to apply the theoretical bases of the subject in the resolution of questions or practical assumptions, with a precise, clear and argued language.
The work will be evaluated, contributing 30% of the final grade.
Passing it is an essential requirement to take the final theory exam. It will be an essential condition to take a minimum of 4 points out of 10, to average with the rest of the grades.
Evaluation and qualification system
The final grade for the subject results from the following weighting:
Evaluation of the theoretical contents. Written exam: 40%
Evaluation and monitoring of practices. Continuous evaluation of practices and oral exam: 30%
Group work score: 30%
Grading system according to the existing law
0.0-4.9 Fail
5.0-6.9 Pass
7.0-8.9 Remarkable
9.0-9.4 Excelent
9.5-10 Outstanding
The evaluation tests will be carried out in person if the situation allows it. In case of changing the conditions, and if instructions are received from the academic authorities, the tests will be carried out in

face-to-face using the online resources of the University of Zaragoza, which will be notified in advance.

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:
A combination of theoretical classes in a large group, practical classes in small groups, as well as the realization of a team work.
Particular importance will be given to participation and personal motivation.
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 program offered to the student to help him achieve the expected results includes the following activities:
Theoretical classes in general group. 10 hours. Explanation and orientation for the personal study of the different contents of the subject, orienting it towards the acquisition of skills and learning outcomes. All the resources of channeling, direction and interaction and supports will be used through the different bibliographic and audiovisual supports.

Face-to-face practical classes. 50 hours.Teaching methodology: Seminars, laboratory practices, evaluation.
Acquired competences: Professionals, attitudinal.Training on practical assumptions and problem solving will be carried out individually and as a team, applying the theoretical bases of the subject and the exercise of communication.
Presentation of a **group work.** It aims to stimulate initiative and personal creativity, the management of documentary sources, the structuring of a logical discourse and the search and achievement of the conclusive synthesis (all of them essential requirements for the task researcher). The use of Vancouver regulations for bio-medical sciences is recommended for both the preparation of the text as for the presentation.

Personal study. From the rest of the activities indicated and as learning results, the student must take responsibility in the creation of structured work schedules and programs in the context of time spent on other subjects.
It should represent the step from motivation, fostered with the learning activities described above, to autonomous exercise of the will.

4.3. Syllabus

Block 1. RESPIRATORY PHYSIOTHERAPY METHODS
- Methods of intervention in Respiratory Physiotherapy. Passive and active respiratory physiotherapy techniques

Block 2. CARDIOCIRCULATORY PHYSIOTHERAPY METHODS
- Methods of intervention in physiotherapy in vascular diseases and their sequelae. Treatment of the amputee of vascular origin.
- Methods of intervention in Physiotherapy in edema of lymphatic origin.
- Methods of intervention in cardiac physiotherapy. Cardiac rehabilitation program

4.4. Course planning and calendar

Calendar of face-to-face sessions and presentation of work Evaluation activities
To pass this subject, the student must demonstrate that he has achieved the learning results through the following evaluation activities.
1- Continuous evaluation of the practices:
Compulsory attendance and active and efficient participation in the theoretical-practical seminars, evaluated with a system mandatory to access the official final exam: the student must demonstrate that she knows how to apply the theoretical bases of the subject in the resolution of practical questions or assumptions, with a precise, clear and argued language.

Oral practical exam.
Passing is a prerequisite for taking the final theory exam.

2- Written exams:
Optional: Eliminatory subject exam at the end of the subject.
Final theory exam of the entire subject in the official call.
It will be allowed if someone expressly requests it to take the oral exam.

3. Presentation of a group work. The student must demonstrate that she knows how to apply the theoretical bases of the subject in the resolution of practical questions or assumptions, with a precise, clear and argued language.
Passing is a prerequisite for taking the final theory exam.

Theoretical classes in large groups: 1h / week throughout the semester. They will be developed in the classroom.

Practical classes: 4h / week during the entire four-month period of teaching the subject in the classroom practices and classroom depending on the didactic needs. The practical classes will be held in 4 groups

Elaboration of a group work, developing a part of the subject chosen by the student.

The planned training activities will be carried out in person in the classrooms and rooms designated by the Center. If the conditions change, and if instructions are received from the academic authorities, they will be modified and adapt the activities to be carried out in a non-face-to-face mode using the online resources of the University of Zaragoza, which will be notified in advance.

4.5. Bibliography and recommended resources

http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=25659