

25604 - Basic principles of physiotherapy

Syllabus Information

Academic year: 2023/24

Subject: 25604 - Basic principles of physiotherapy

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

Degree: 605 - Degree in Physiotherapy

ECTS: 6.0

Year: 1

Semester: First semester

Subject type: Compulsory

Module:

1. General information

This subject is intended to introduce the student to the set of specific physiotherapy subjects. Thus, it provides the fundamental foundations of physiotherapy to be later complemented and developed by subjects such as: Assessment in physiotherapy, General procedures of intervention in physiotherapy, Specific methods of intervention in physiotherapy and Physiotherapy in clinical specialties, among others. In turn, and beyond preparing the student for future subjects that will develop during their studies of Physiotherapy, it is intended to encourage attitudes such as teamwork, critical analysis or entrepreneurship, so that they can contribute the most as a Physiotherapist to society.

The subject and its expected results respond to the following approaches and goals:

- To know the concept of physiotherapy, its historical evolution and the current role of both physiotherapy and the physiotherapist in people's health
- To have a basic knowledge of the different therapeutic modalities used in physiotherapy and areas of work of the physiotherapist
- To establish the scientific bases of physiotherapy that allow the development of evidence-based physiotherapy, stimulating critical thinking and entrepreneurial attitude of the future physiotherapist.
- To describe the main characteristics of the physiotherapist's examinations and methods of intervention through the incorporation of clinical reasoning as a basic aspect of them and experimentation.
- To know the principles and models of action of Physiotherapy in the public and private health field
- To make the future Physiotherapist aware of the need for lifelong learning and of their contribution to the education of society and of scientific dissemination related to Physiotherapy.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), such that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to

its achievement. Specifically, the subject plans to address the following objectives, making the student aware of the importance of its contribution to the achievement of Goal 3: Ensure Healthy Lives and Promote Wellness for All at All Ages.

2. Learning results

The student, in order to pass this subject, must demonstrate the following learning results:

1. Knows the concept and theoretical basis of physical therapy through the analysis of several examples.
2. Describes the development of physiotherapy following its methodological evolution.
3. Understands the physiotherapist's functions, attitudes and skills through the analysis of several examples of real application in the different fields of physiotherapy.
4. Understands and describes the different models of physiotherapy in the public and private health care settings.
5. Knows how to evaluate the method of intervention in physiotherapy through the analysis of different models of application of physiotherapy.

3. Syllabus

The program will consist of theoretical and practical classes and specific seminars:

THEORY:

Block 1. Physiotherapy as a science and profession (Topics 1-5)

Unit 1. Concept of physiotherapy: profile and functions of the physiotherapist.

Unit 2. The profession of Physiotherapist within the health care field: specialization of the Physiotherapist.

Unit 3. Physiotherapy as a science.

Unit 4. Conceptual foundations of physical therapy.

Unit 5. Institutionalization of physical therapy.

Block 2: Physiotherapy Intervention Process (Topics 6-8)

Unit 6. Method of intervention in physiotherapy.

Unit 7. Clinical interview and examinations performed in physiotherapy.

Unit 8. Principles of physiotherapeutic treatment.

Block 3. History of Physical Therapy (Topic 9)

Unit 9. History of physiotherapy.

Block 4. Physiotherapy models of action in public and private health care (Topic 10)

Topic 10. The Physiotherapist in the Public and Private sector. The competences of the Physiotherapist in the different areas of care and areas of specialization.

PRACTICES:

Practice 1. The method of intervention in Physiotherapy / Clinical Reasoning (assessment of range of motion at the lower extremity: changes that occur after stretching).

Practice 2. The method of intervention in Physiotherapy / Clinical Reasoning (assessment of range of motion in the lower extremity: differentiation between structural and neural).

Practice 3. The method of intervention in Physiotherapy / Clinical Reasoning (general massage therapy in the cervical spine and thoracic region).

Practice 4. The method of intervention in Physiotherapy / Clinical Reasoning (functional taping)

Practice 5. The method of intervention in Physical Therapy / Clinical Reasoning (the human being as a complex system)

Practice 6. The method of intervention in Physiotherapy / Clinical Reasoning (changes in local and referred pain in a muscle contracture)

Practice 7: The method of intervention in Physiotherapy / Clinical Reasoning (changes with dry needling combined with different physical stimuli/agents: needle effect and placebo effect)

Practice 8. Practical skills of the Physiotherapist in the performance of functional tests I

Practice 9. Practical skills of the Physiotherapist in the performance of functional tests II

Practice 10. Practical skills of the physical therapist in the performance of functional tests III

SEMINARS:

Seminar 1: Environmental Physiotherapy.

Seminar 2: Entrepreneurship and entrepreneurial attitude.

Seminar 3: Self-employed private practice. Legal and tax requirements in Spain to practice as a Physiotherapist on for both self-employed and employed people..

Seminar 4: Competencies of the Physiotherapist in the field of management. Practical application to the private sector and to entrepreneurship in Physiotherapy.

Seminar 5: How can I know the scientific evidence on a topic that affects my professional practice? Practical exercise to search for available scientific evidence on a topic of interest.

Seminar 6: Proper citation of bibliographic references and concept of plagiarism (to be complemented with an online course conducted by the library service)

Seminar 7: How should I present to other professionals the scientific evidence that supports my professional actions as a Physiotherapist? Writing examples

Seminar 8: The method of intervention in Physiotherapy / Clinical Reasoning: implications for the clinical practice of Physiotherapy. Application to ankle mobility practice 1.

Seminar 9: The method of intervention in Physiotherapy / Clinical Reasoning: implications for the clinical practice of Physiotherapy. Application to practice 2 of structural-neural differentiation.

Seminar 10: The method of intervention in Physiotherapy / Clinical Reasoning: implications for the clinical practice of Physiotherapy. Application to practice 3 and 4 of massage therapy and functional taping.

4. Academic activities

The subject is structured in a series of theoretical topics that are taught through lectures and whose objective is that the student can acquire knowledge on specific topics and consult doubts that may arise during the exposition of the same by the teacher. There will be a total of 30 theoretical classes per student, single group (30 hours per student) This first theoretical part will be coordinated throughout the term with theoretical-practical seminars in which the student can deepen in some theoretical topics previously exposed and use the data and explorations performed in practices to develop a clinical reasoning following the method of intervention in physiotherapy / clinical reasoning.

There will be a total of 10 seminars with the class divided into two groups (10 hours per student).

In parallel, the student will carry out a series of practices where they will be able to put into practice the method of intervention in

Physiotherapy / Clinical Reasoning for examples that they will encounter in their day-to-day work as a Physiotherapist and that will be expanded in subsequent years. There will be a total of 10 2-hour practices (20 hours of practice per student)

5. Assessment system

The evaluation of the subject will be divided into three parts:

1. Completion of a final objective test on the theoretical content of the subject (60% of the final grade). It will be necessary to pass this part independently in order to pass the subject.
2. Elaboration of an individual work (15% of the final grade), consisting of the elaboration of a practice notebook where, at the end of each practice, the student must add a reflection on what has been learned in that practice and a scientific article that has used that method of intervention or is directly related to the practice, arguing why it has been chosen and how it is considered to be related. Only and exclusively the reflection associated with each practice will be evaluated, which must be submitted in digital format (pdf) through Moodle. The student will present their complete workbook so that the teacher can evaluate their reflection on the basis of the data contained therein, but this reflection is what the teacher will exclusively assess.
3. Group work (15% final grade). Groups will be preferably of between 4-6 students. Students will be able to choose among different works:
 - Option 1: Based on the work done in seminars 5, 6 and 7, each group may present a brief review of the selected topic of interest where references are properly cited (related to future DFP subject where an introduction of these characteristics will be requested). There will be a brief presentation of the topic in class with power point and the deliverable will consist of a pdf document of minimum one page and maximum two pages, without including references.
 - Option 2: Interview a physiotherapist asking, among other things, about the competencies they develops in their job, organization of the job, the team work they performs, the evolution that has taken place in their work as a physiotherapist in that position, etc. There will be a brief presentation of the topic in class with power point and the deliverable will consist of the power point itself.
 - Option 3: Applications of artificial intelligence as an aid to study and/or professional practice. Possible risks and implications. In this work, the student will be able to test the use of AI-based applications and present how these can help the study or future professional practice. A brief presentation of the topic will be made in class with power point and the deliverable will consist of the power point and/or explanatory pdf document.
4. Participation: The faculty of the subject will grade 10% of the final grade according to the participation of students in the different activities scheduled within the term (voluntary mentoring of students who have enrolled later in the Degree) and in the online training activities proposed from the library service on digital skills.

It will be mandatory to attend 80% of the practices in order to pass the subject. In case of not reaching the minimum attendance the teacher, after evaluating the practical notebook may determine the need to perform a practical test to evaluate the competences of the practices that have not been attended. For those students who enrol after the beginning of the practices, 80% will be counted from the day of their enrolment, although the reflective commentary on each practice will be evaluated to ensure that the student has acquired the necessary co