

The Foundations of Physiotherapy

Code: 104099
ECTS Credits: 6

| Degree | Type | Year | Semester |
|-----------------------|------|------|----------|
| 2500892 Physiotherapy | OB | 1 | 1 |

Contact

Name: Sandra Torrell Vallespin
Email: Sandra.Torrell@uab.cat

Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Teachers

Laura García Galí
Eduard Coll del Cura

Prerequisites

None

Objectives and Contextualisation

The subject is taken in the first semester of the first year of the Physiotherapy degree and forms part of the group of compulsory subjects. The subject is part of the necessary scientific grounding of the graduate in Physiotherapy and has the following aims.

- To know the historical evolution of physical, natural and complementary therapies and their professional independence within the framework of the biomedical sciences. From a socio-historical perspective, students are offered the critical elements that allow the analysis and understanding of the current state of physiotherapy.
- To learn the theoretical bases and the development of methods and procedures of physiotherapy care.
- To analyse and synthesize the information about the patient collected during the anamnesis.
- To carry out the recording of data, the clinical history, the diagnosis in physiotherapy, as well as the main methods and techniques of treatment.
- To organize and plan the physiotherapy treatment according to the objectives.
- To track the patient's progression correctly and prepare the discharge report.
- To locate by palpation the different musculoskeletal structures of the human body.
- To describe and carry out correctly the evaluation of muscle strength through muscle balance.

- To learn sufficient vocabulary to express oneself fluently, coherently and in accordance with the established rules, both orally and in writing.
- To acquire problem-solving strategies.

This subject is complemented by other basic and compulsory subjects, such as Anatomy, Physiology and Biophysics.

Competences

- Display critical reasoning skills.
- Display knowledge of the morphology, physiology, pathology and conduct of both healthy and sick people, in the natural and social environment.
- Display knowledge of the physiotherapy methods, procedures and interventions in clinical therapeutics.
- Display knowledge of the sciences, models, techniques and instruments around which physiotherapy is structured and developed.
- Evaluate the functional state of the patient, considering the physical, psychological and social aspects.
- Express ideas fluently, coherently and correctly, both orally and in writing.
- Make a physiotherapy diagnosis applying internationally recognised norms and validation instruments.
- Produce and systematically keep physiotherapy records.
- Work effectively and cooperatively in multidisciplinary professional teams.
- Work in teams.
- Write the physiotherapy discharge report once the established objectives have been attained.

Learning Outcomes

1. Apply appropriate physiotherapy assessment procedures, in order to determine the degree of involvement of the musculoskeletal and its possible impact functional system.
2. Apply methods, procedures and basic physiotherapy performances in the therapy of injuries and / or diseases affecting the musculoskeletal system, with emphasis on manual therapy.
3. Apply the manual and instrumental methods and procedures for making the physiotherapy diagnosis.
4. Describe and analyze the methods of analysis of human movement.
5. Describe and apply advanced evaluation procedures in physiotherapy in order to determine the degree of damage to the musculoskeletal system and possible functional repercussions.
6. Describe the manual and instrumental methods and procedures used for assessment in physiotherapy.
7. Display critical reasoning skills.
8. Elaborate the clinical history of physiotherapy including all necessary information for it to be a valid instrument of intra and interdisciplinary communication.
9. Enumerate and describe the different elements that conform the typical physiotherapy records that form part of the case history.
10. Enumerate and describe the elements that make up a high-quality physiotherapy report.
11. Explain and apply the theoretical principles behind physiotherapy methods and procedures.
12. Explain the concept, evolution and fundamental principles of physiotherapy from both the scientific perspective and that of the professional practitioner.
13. Explain the different competences of the professionals that make up the multidisciplinary team that the physiotherapist belongs to.
14. Explain the general theory of functions, disability and health and their international classification, and models for physiotherapy interventions in healthcare practice.
15. Express ideas fluently, coherently and correctly, both orally and in writing.
16. Identify the methodology necessary for determining the physiotherapy diagnosis.
17. Locate the different muscles through surface palpation.
18. Suitably record all steps taken, from reception of the patient to the physiotherapy discharge report, in accordance with each clinical specialisation.
19. Work in teams.

Content

THEORETICAL PART (10h)

LECTURER: Sandra Torrell (Sandra.Torrell@uab.cat)

1. INTRODUCTION TO PHYSIOTHERAPY (2h)

1.1 What is physiotherapy?

1.2 Physiotherapy versus rehabilitation

1.3 Competence framework of physiotherapy

1.4 Areas of activity of physiotherapy

2. THERAPEUTIC PERFORMANCE (2h)

2.1 Therapeutic function

2.2 Physical agents

3. PROCESS OF PHYSIOTHERAPY CARE (PPC) (1h)

3.1 Stages of the PPC

3.2 Methodology of action

4. CLINICAL HISTORY IN PHYSIOTHERAPY (5h)

4.1 Concept of clinical history

4.2 Parts of the clinical history

4.2.1 Anamnesis

4.2.2 Patient examination

- Systems exploration

- Valuation scales

- Supplementary tests

4.2.3 Physiotherapy diagnosis

- Concept

- Goals

- Competences and limits

4.2.4 Physiotherapy treatment

- Therapeutic goals

- Improvement indicators

- Establishment of physiotherapy treatment

4.2.5 Evolutionary course

4.2.6 Discharge report

PRACTICAL PART (42.5h)

LECTURERS: Sandra Torrell (Sandra.Torrell@uab.cat) Eduard Coll del Cura (eduardcoll81@gmail.com)
Laura García Galí

1. INTRODUCTION TO THE MUSCLE BALANCE TECHNIQUES (1.5h)

2. MUSCLE BALANCE OF THE UPPER LIMBS (25h)

2.1 Shoulder

2.2 Elbow

2.3 Wrist

2.4 Hand and fingers

3. MUSCLE BALANCE OF THE LOWER LIMBS (17h)

3.1 Hip

3.2 Knee

3.3 Ankle

3.4 Foot and fingers

Methodology

The subject is based on theoretical and practical classes.

ATTENDANCE at laboratory practicals (PLAB) is COMPULSORY.

The use of MOBILE PHONES, SMARTWATCHES, HEADPHONES or other ELECTRONIC DEVICES is not allowed during the theoretical and PLAB classes, nor during the exams. The PLAB dossiers must be printed on paper.

NO PHOTOGRAPHS OR RECORDINGS (audio and video) during the CLASSES are allowed. All material is subject to copyright and will be posted on the Campus Virtual platform. Doing business with the material posted on the Campus Virtual will automatically lead to failing the subject and it will be the lecturer's decision to take legal action against the student through the legal services of the UAB.

Students arriving 10 or more minutes late for a class will NOT be allowed to enter the classroom and will be counted as absent without justification.

It is mandatory to attend the PLAB with the appropriate clothing: bikini, large towel or pareo, eyeliner pencil and make-up remover wipes or similar.

It is ESSENTIAL to take care of PERSONAL HYGIENE.

Watches, rings, bracelets, earrings, or any other element that may be detrimental to the comfort and safety of the student during the execution of the physiotherapy techniques, may not be worn in PLAB sessions. Students' hair must be tied back and their nails short and unpainted.

Any INAPPROPRIATE BEHAVIOUR by a student during the classes that may be a nuisance to the lecturer or to the other students entitles the lecturer to remove the student from the classroom. Each expulsion will be treated as an unjustified absence and will deduct 0.25 points on the exam.

Eating and drinking during classes is prohibited.

Activities

| Title | Hours | ECTS | Learning Outcomes |
|---|-------|------|---|
| Type: Directed | | | |
| LABORATORY PRACTICALS | 42.5 | 1.7 | 3, 1, 6, 4, 5, 15, 17, 7, 19 |
| THEORY | 10 | 0.4 | 3, 1, 6, 5, 8, 9, 10, 12, 11, 14, 13, 15, 16, 7, 18, 19 |
| Type: Autonomous | | | |
| SELF STUDY, READING ARTICLES, REPORTS OF INTEREST | 90 | 3.6 | 3, 2, 1, 6, 4, 5, 8, 9, 10, 12, 11, 14, 13, 16, 17, 18 |

Assessment

The evaluation of the theoretical part of the subject is equivalent to 3 points (out of 10) of the overall grade for the subject and will be done by means of a multiple-choice test with 1 correct answer and 0.33 penalty-points for each wrong answer. It will be necessary to score at least 5 in this test for it to be taken into account when calculating the overall grade.

The assessment of laboratory practicals is equivalent to 7 points (out of 10) of the overall grade for the subject. It will be carried out by means of two oral theoretical-practical exams. Each of these interim exams is equivalent to 3.5 points (out of 10) of the overall grade for the subject. A mark of at least 5 must be obtained in each of the interim exams for them to be taken into account when calculating the overall grade. Attendance at laboratory practicals is mandatory. Each absence will subtract 0.25 points.

The final score will be the sum of the points obtained in the evaluation of theoretical knowledge (30%) and laboratory practicals (70%). It will be necessary to obtain a final grade of at least 5 to pass the subject.

Students who do not attend any of the 3 assessment tests will be graded as Non-Assessable in their academic record.

Students who have failed the exam on theory and/or exams on laboratory practicals, may take the resit exam. However, this cannot be allowed under any circumstances in the case of students graded as Non-Assessable in their academic record.

If copying of any kind is detected in the exams, the subject will be automatically failed with a mark of 0.

Students arriving 10 or more minutes late for a class will NOT be allowed to enter the classroom and will be counted as absent without justification.

The two theoretical-practical oral exams will audio- and/or video-recorded for correction and subsequent review. In order to take them, it is mandatory for students to have given their written consent to this recording if they are of legal age, or for their parents or legal guardians to have done so if the student is a minor. Without the signed consent the students will not be able to carry out the theoretical-practical exams and will be graded as Non-Assessable in their academic records.

Self-certification of absences through documents written and/or signed by the students themselves or by their parents or other family members is not allowed.

Assessment Activities

| Title | Weighting | Hours | ECTS | Learning Outcomes |
|-------|-----------|-------|------|-------------------|
|-------|-----------|-------|------|-------------------|

| | | | | |
|---|-----|-----|------|--|
| Objective test of multiple-choice questions | 30% | 3 | 0.12 | 3, 2, 1, 6, 5, 8, 9, 10, 12, 11, 14, 13, 15, 16, 7, 18, 19 |
| Structured oral tests | 70% | 4.5 | 0.18 | 3, 1, 6, 4, 5, 15, 17, 7, 19 |

Bibliography

Gallego T. *Bases teóricas y fundamentos de la fisioterapia*. Madrid: Editorial Médica Panamericana. Colección Panamericana de fisioterapia. 2007

Alcántara S et al. *Fundamentos de fisioterapia*. Madrid: Síntesis. 1995

Viel, E. Diagnóstico fisioterápico. Concepción, realización y aplicación en la práctica libre y hospitalaria. Barcelona: Elsevier Masson; 1999

Meadows JT. *Diagnóstico diferencial en fisioterapia*. Madrid: McGraw-Hill Interamericana 2000

Palmer ML et al. *Fundamentos de las técnicas de evaluación músculoesqueléticas*. Barcelona: Paidotribo. 2003

Kendall. *Músculos: pruebas y funciones*. Barcelona: Jims. 1984

Daniel & Worthingham. *Técnicas de Balance muscular*. 9a. Ed. Madrid: Elsevier Saunders. 2014

Hoppenfeld S. *Exploración física de la columna vertebral y las extremidades*. México: Manual Moderno. 1979

Daza J. *Evaluación clínico-funcional del movimiento corporal humano*. Bogotá: Panamericana. 2007

Kaltenborn FM. *Fisioterapia manual*. Madrid: McGraw-Hill Interamericana. 2004

Plaja J. Analgesia por medios físicos. Madrid: McGraw-Hill Interamericana; 2003

Rodríguez Martín JM. Electroterapia en fisioterapia. Madrid: Médica Panamericana; 2000

Miangolarra JC. Rehabilitación clínica integral: funcionamiento y discapacidad. Barcelona: Masson; 2003

French S et al. Fisioterapia: un enfoque psicosocial. Madrid: McGraw-Hill Interamericana; 2006

OMS. Clasificación internacional del funcionamiento, la discapacidad y de la salud (CIF). Madrid: Ministerio de Trabajo y Asuntos Sociales, Instituto de Migraciones y Servicios Sociales; 2001

WHO. International Classification of Impairments, Disabilities and Handicaps (ICIDH). A manual relating to consequences or diseases. Ginebra: WHO

Gonzalez M. Usos de la clasificación internacional de deficiencias, discapacidades y minusvalías (CIIDM). Instituto nacional de Servicios Sociales. Perspectivas de rehabilitación internacional. Madrid: Ministerio de

Asuntos Sociales. Instituto Nacional de Servicios Sociales

Asociación Española de Fisioterapeutas. Reglamento Nacional. Concepto de fisioterapia y de fisioterapeuta. Funciones y código deontológico. Madrid; 1992