COURSE DATA

DATA SUBJECT

Code: 33021
Name: Pulmonary physiotherapy
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2026-27

STUDY (S)

Degree	Center	Acad. year	Period
1202 - Degree in Physiotherapy	Facultat de Fisioteràpia	3	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1202 - Degree in Physiotherapy	Specific intervention methods in physiotherapy	COMPULSORY

COORDINATION

CEBRIA I IRANZO MARIA DELS ÀNGELS

MARTINEZ ARNAU FRANCISCO MIGUEL

SUMMARY

The Respiratory Physiotherapy course pretends that the student developes knowledge, skills and attitudes which are necessary to plan, intervene and assess physiotherapy techniques in order to promote, prevent and recover health status in the different respiratory diseases

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE

There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

It is not necessary previous requirements.

COMPETENCES / LEARNING OUTCOMES

1202 - Degree in Physiotherapy

Acquire knowledge related to the information and communication technologies.

Acquire sensitivity to environmental issues.

Have the ability to organise and plan work.

Know how to apply the different physiotherapy techniques for the promotion, prevention and health preservation in the pathologies of the locomotor, respiratory, cardiovascular and nervous systems. Know how to apply manual techniques, manipulative therapy, osteopathy and chiropractic techniques.

Know how to assess the results of the physiotherapy treatment.

Know how to establish a therapeutic plan to reach the proposed goals.

Know how to evaluate the physiotherapy treatment applied.

Know how to plan treatment goals in the different pathologies of the locomotor, respiratory, cardiovascular and nervous systems from the data of the Physiotherapy Clinical Records.

Recognise diversity, multiculturality, democratic values and peace culture.

Respect fundamental rights and equality between men and women.

Work in teams.

DESCRIPTION OF CONTENTS

1. Theoretical program

Didactic Module 1. Physiotherapeutic assessment of the patient with respiratory disorders.
Topic 1. Introduction. Respiratory physiotherapy: conceptualisation and fundamental principles.
Topic 2. Assessment of the respiratory patient: semiology and main measurement scales.
Topic 3. Clinical interpretation of spirometry and blood gases.
Topic 4. Clinical interpretation of respiratory muscle function, cough capacity and exercise tolerance.

Didactic Module 2. Specific methods of intervention in physiotherapy.
Topic 5. Basic principles of inhaled therapy.
Topic 6. Importance of physical exercise in patients with respiratory disorders.
Topic 7. Basic aspects of ventilation. Re-education of ventilation.
Topic 8. Management of secretions in patients with respiratory disorders I.
Topic 9. Management of secretions in the patient with respiratory involvement II.
Topic 10. Basic guidelines for oxygen therapy in physiotherapy.
Topic 11. Non-invasive mechanical ventilation for physiotherapists.

Didactic Module 3. Respiratory physiotherapy applied to clinical practice.

Topic 12. Physiotherapy in the main obstructive respiratory pathologies.
Topic 13. Respiratory physiotherapy in restrictive respiratory pathologies I.
Topic 14. Respiratory physiotherapy in restrictive respiratory pathologies I
Topic 15. Respiratory physiotherapy in paediatrics.

2. Practical program

Didactic Module 1. Physiotherapeutic assessment of the patient with respiratory disorders.
Practice 1. Clinical interview, semiological study and physical examination in people with respiratory pathology.
Practice 2. Interpretation of the functional respiratory examination: simple and forced spirometry. Assessment of the respiratory musculature (strength and resistance) and simple exercise tests in the respiratory patient.
Practice 3.1. Interpretation of blood gas, pulse oximetry and capnography.

Didactic Module 2. Specific methods of intervention in physiotherapy.
Practice 3.2. Use of inhaled therapy in physiotherapy.
Practice 4. Design and implementation of therapeutic exercise programmes for people with respiratory disorders.
Practice 5. Methods for reeducation of the ventilatory pattern.
Practice 6. Bronchial drainage techniques I.
Practice 7. Bronchial drainage techniques II-.
Practice 8. Approach to respiratory failure: oxygen therapy and non-invasive mechanical ventilation.

Didactic Module 3. Respiratory physiotherapy applied to clinical practice.
Practice 9. Physiotherapy intervention in patients with obstructive pathology.
Practice 10. Physiotherapeutic intervention in patients with restrictive pathology.
Practice 11. Physiotherapy intervention in paediatric patients.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	15,00
Laboratory	45,00
Total hours	**60,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	33,00
Preparation of lessons	24,00
Preparation for assessment activities	33,00
Resolution of case studies	0,00
Total hours	**90,00**

TEACHING METHODOLOGY

The theoretical teaching will take place in the classroom with the agenda for presentation (lecture type), indicating the student's bibliography consultation.

The practical training will consist of the implementation of different manual techniques and instruments. Videos will be presented with reports made to health centres that are related to surgical procedures, pulmonary function examinations, physiotherapy clinical assessments of patients. For all resources will be used and teaching laboratory equipment available in the Center for programs related to chest physiotherapy.

The teaching program might be modified during the development of the subject if the professor considers it appropriate, in order to guarantee the teaching quality and the learning process.

EVALUATION

Theoretical program (35% of the final mark)

1.Written test (35%): Multiple choice test with 25 questions, with one correct choice out of four in each question.

Score = [correct answers - (errors/nº options-1)]* (maximal score/nº questions)

Practical program (65% of the final mark)

1. Oral test (25%). Practical examination of the contents of the subject.

2. Clinical case (20%).Resolution of a case through a multiple choice test and short questions. 5 multiple choice test questions, with one correct choice out of four in each question. Score = [correct answers - (errors/nº options-1)]* (maximal score/nº questions). 2 short questions, with 50% of the score of the evaluation tool.

3. Continuous evaluation (20%). 2 activities on practical contents to be carried out during the class period.

The final grade for the course will be averaged when the student has obtained at least 50% of the maximum score on each of the programmes: theoretical program and practical program.

The score obtained for each of the tests (final exam, oral test, clinical case and continuous evaluation) will

be saved between semesters.

REFERENCES

Basic

Página Web SEPAR (http://www.separ.es/biblioteca-1/Biblioteca-para-Profesionales). Manuales y normativas SEPAR.
Seco J (coord.). Sistema Respiratorio. Métodos, fisioterapia clínica y afecciones para fisioterapeutas. Ed. Médica Panamericana. Madrid, 2018.
Gómez Garrido A (coord.) Rehabilitación Respiratoria. Panamericana 2025.
Peroy Badal R, Torres Castro R y Maganto García A (coordinadores). Fisioterapia respiratoria y cardiaca. De la teoría a la práctica. Fuden. Madrid, 2021.

Additional

Camba SS., Doniz LG, García AL, Paz AL. Guía práctica de fisioterapia respiratoria. Universida de da Coruña, Servizo de Publicacións. Coruña, 2017.
Postiaux Guy. Fisioterapia respiratoria en el niño. Ed. McGrawHill. Madrid, 2001.
Valenza G, González L, Yuste MJ. Manual de fisioterapia respiratoria y cardiaca. Editorial Síntesis. Madrid, 2005.

In addition, each subject will specify the books, scientific articles and readings of interest recommended for the preparation of the contents addressed.