COURSE DATA

DATA SUBJECT

Code: 33022
Name: Cardiocirculatory physiotherapy
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

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

CEZON SERRANO NATALIA

MARQUES SULE ELENA

SUMMARY

The Cardiocirculatory Physiotherapy course pretends that the student developes knowledge, skills and attitudes necessary to plan, treat and assess the physiotherapy intervention in order to promote, prevent and recover health status in different cardiocirculatory 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

There are no previous requirements.

COMPETENCES / LEARNING OUTCOMES

-

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. Introduction (theoretical program)

Lesson 1. Introduction to Cardiocirculatory Physiotherapy.
Lesson 2. Review of the anatomical and physiological cardiovascular system: a basis for physiotherapy practice.

2. Planning the physiotherapy performance (practical program)

Seminar 1. Introduction and planning of the group work.
Seminar 2. Clinical case study: heart disease.
Seminar 3. Presentation of the group work.

3. Physiotherapy in heart diseases (theoretical program)

Lesson 3. Clinic and functional assessment of heart diseases.
Lesson 4. Cardiac rehabilitation: concept, objectives, multidisciplinary and comprehensive program.
Lesson 5. Cardiac rehabilitation: phases of cardiac rehabilitation and physiotherapy.
Lesson 6. Physiotherapy in ischemic heart disease.
Lesson 7. Physiotherapy after cardiac surgery: coronary artery bypass grafting, valve surgery and congenital heart disease.
Lesson 8. Physiotherapy in heart failure.
Lesson 9. Physiotherapy in heart transplantation.
Lesson 10. Physiotherapy in hypertension.

4. Physiotherapy in heart diseases (practical program)

Practice 1. Basic life support in the cardiac rehabilitation context.
Practice 2 Clinic and functional assessment of heart diseases.
Practice 3. Physiotherapy in the different cardiac rehabilitation phases .

5. Physiotherapy in peripheral vascular diseases (theoretical program)

Lesson 11. Clinic and functional assessment in peripheral artery disease.
Lesson 12. Physiotherapy in peripheral artery disease.
Lesson 13. Clinic and functional assessment in venous and lymphatic insufficiency.
Lesson 14. Physiotherapy in venous insufficiency.
Lesson 15. Physiotherapy in lymphedema: decongestive lymphatic therapy.

6. Physiotherapy in peripheral vascular diseases (practical program)

Practice 4. Clinic and functional assessment in peripheral artery disease. Kinesiotherapy in peripheral artery disease.
Practice 5. Clinic and functional assessment in venous insufficiency. Physiotherapy in deep vein thrombosis.
Practice 6. Physiotherapy in circulatory return problems (venous and lymphatic insufficiency). Compression and containment techniques for upper and lower limb.
Practice 7. Manual lymphatic drainage (MLD): general aspects, description and application of basic manipulations. MLD on neck, MLD on breast.
Practice 8. MLD on upper limb, MLD on lower limb.

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	20,00
Independent study and work	43,00
Preparation of lessons	0,00
Preparation for assessment activities	27,00
Resolution of case studies	0,00
Total hours	**90,00**

TEACHING METHODOLOGY

The contents of the theoretical program are developed in traditional lectures with active participation of students.

Throughout the practical program, students learn by simulating physiotherapy techniques in the professional context, solving clinical cases and problems and planning physiotherapeutic management. Cooperative learning will be encouraged in groups, aiming at encouraging the exchange of ideas and fostering students´ active participation.

Seminars are of compulsory attendance.

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 (30% of final mark)

1.Final exam (30%): Multiple choice test: 30 questions, 3 answers, 1 correct. MARK =[hits-(errors/nº options-1)]* (maxilmal mark/nº questions).

Practical program (70% of final mark)

1. Continuous assessment task (10%). The assessment criteria of the task to be provided by the teaching staff.

2. Group work and presentation (20%). The assessment criteria of the task to be provided by the teaching staff.

3. Final exam (40%). Simulation of physiotherapy techniques.

In all written tests orthographic incorrection will be penalized, and in the case of the group work plagiarism will be penalized. The final mark for the course will be the pondered sum of the marks on the theoretical and practical programs, provided that the student had obtained at least 50% of the maximum score on each one of the final tests (theoretical final exam and practical final exam) and had completed, presented and passed the group work. Failure to attend seminars 1 and 3 will result in a penalty in the group work mark (0.2 points for each seminar not attended).
The score obtained at the first call of the theoretical final exam, the practical final exam and the group work will be used in the second call of the same academic course. In order to qualify and pass/approve the continuous assessment tasks of the practical program, they must be carried out and delivered following the instructions provided by the teaching staff.

REFERENCES

Basic

- American Association of Cardiovascular & Pulmonary Rehabilitation. Guidelines for Cardiac Rehabilitation and Secondary Prevention Programs. 5th ed Human Kinetics; 2013.
- Cebrià i Iranzo MA, Sentandreu Añó T, Espí López GV, Mora Amérigo ER, García Lucerga MC, Igual Camacho C. Fisioterapia cardiocirculatoria. Material multimedia disponible en: http://roderic.uv.es/handle/10550/1999/search
- Ferrandez JC, Theys S, Bouchet JY. Reeducación de los edemas de los miembros inferiores. Barcelona: Masson; 2002.
- Fardy PS, Yanowitz FG. Rehabilitación Cardíaca: la forma física del adulto y las pruebas de esfuerzo. Barcelona: Editorial Paidotribo; 2003.
- Niebauer J. Cardiac rehabilitation manual. Suiza: Springer; 2017
- Seco Calvo J. Sistema Cardiovascular. Métodos, fisioterapia clínica y afecciones para fisioterapeutas. Madrid: Editorial Médica Panamericana; 2017.
- Vinyes F. La linfa y su drenaje manual. 7ª ed. Barcelona: RBA integral; 1998.

Additional

- Maroto Montero JM, De Pablo Zarzosa C, eds. Rehabilitación Cardiovascular. Madrid: Editorial Médica Panamericana; 2011.
- Pleguezuelos Cobo, Miranda Calderón, Gómez González, Capellas Sans. Principios de Rehabilitación Cardiovascular. Madrid: Editorial Médica Panamericana; 2011.
- Probert H et al. Standards for Physical Activity and Exercise in the Cardiovascular Population. 3rd Edition. London (UK): Association of Chartered Physiotherapists in Cardiac Rehabilitation, 2015

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