

**COURSE DATA****Data Subject**

Code	33022
Name	Cardiocirculatory physiotherapy
Cycle	Grade
ECTS Credits	6.0
Academic year	2020 - 2021

Study (s)

Degree	Center	Acad. year	Period
1202 - Degree in Physiotherapy	Faculty of Physiotherapy	3	First term

Subject-matter

Degree	Subject-matter	Character
1202 - Degree in Physiotherapy	13 - Specific intervention methods in physiotherapy	Obligatory

Coordination

Name	Department
CEZON SERRANO, NATALIA	191 - Physiotherapy
MARQUES SULE, ELENA	191 - Physiotherapy

SUMMARY

The Cardiocirculatory Physiotherapy course pretends that the student develops 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

It is not necessary previous requirements.

OUTCOMES

1202 - Degree in Physiotherapy

- Respect fundamental rights and equality between men and women.
- Recognise diversity, multiculturality, democratic values and peace culture.
- Work in teams.
- Have the ability to organise and plan work.
- Acquire knowledge related to the information and communication technologies.
- Acquire sensitivity to environmental issues.
- 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.
- Know how to establish a therapeutic plan to reach the proposed goals.
- 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 evaluate the physiotherapy treatment applied.
- Know how to assess the results of the physiotherapy treatment.

LEARNING OUTCOMES

Learning outcomes that students should acquire are:

1. Know physiotherapy objectives in different cardiocirculatory diseases and clinical situations.
2. Plan the physiotherapy intervention according programmed objectives.
3. Apply physiotherapy techniques appropriately in the cardiocirculatory pathology.
4. Assess the results of physiotherapy intervention and proceed accordingly.
5. Work in groups and understand the importance of multidisciplinary professional team.

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 continuous assessment tasks.

Seminar 2. Study of clinical cases: heart disease.

Seminar 3. Planning objectives and physiotherapeutic management in heart diseases.

Seminar 4. Study of clinical cases: peripheral vascular diseases.

Seminar 5. Planning objectives and physiotherapeutic management in circulatory diseases.

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 arterial disease.

Lesson 12. Physiotherapy in peripheral arterial 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 and massage 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

ACTIVITY	Hours	% To be attended
Laboratory practices	45,00	100
Theory classes	15,00	100
Development of individual work	20,00	0
Study and independent work	33,00	0
Readings supplementary material	10,00	0
Preparation of evaluation activities	27,00	0
TOTAL	150,00	

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 solving clinical cases and problems and simulating physiotherapy techniques in the professional context. Cooperative learning will be encouraged, either in pairs or groups of 4 people, aiming at encouraging the exchange of ideas.

Three practical seminars are of compulsory attendance: Seminar 1 (Introduction and planning of the continuous assessment tasks), Seminar 3 (Planning objectives and physiotherapeutic management in heart diseases.) and seminar 5 (Planning objectives and physiotherapeutic management in circulatory diseases).

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 (40% of final mark)

1. Final exam (40%):

- a) Multiple choice test (30%): 30 questions, 3 answers, 1 correct. $MARK = [hits - (errors/n^{\circ} options - 1)] * (maximal\ mark/n^{\circ} questions)$.
- b) Short answer test (10%): development of a clinical case.

Practical program (60% of final mark)

- 1. Continuous assessment tasks (20%). The assessment criteria of the task to be provided by the teaching staff.
- 2. Final exam (40%). Simulation of physiotherapy techniques.

In all written tests orthographic incorrection will be penalized, and in the case of the continuous assessment tasks 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 delivered all the continuous assessment tasks in the corresponding call.

The score obtained at the theoretical final exam will not be used in future calls. The score obtained at the first call of the practical final exam will be used in the second call of the same academic course. In order to qualify 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

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Additional

- Achttien RJ, Staal JB, Van der Voort S, Kemps HMC, KoersH, Jongert MWA, et al. Practice Recommendations Development Group. Exercise-based cardiac rehabilitation in patients with coronary heart disease: a practice guideline. *Netherlands Heart Journal*, 2013; 21(10), 429-438.
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ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

No addendum to the academic guide for the academic year 2020/2021