



Universitat de Lleida

# DEGREE CURRICULUM

# **CHRONIC PATHOLOGIES AND PHYSICAL ACTIVITY**

Coordination: FERNÁNDEZ LAGO, HELENA

Academic year 2023-24

## Subject's general information

Subject name	CHRONIC PATHOLOGIES AND PHYSICAL ACTIVITY			
Code	102734			
Semester	1st Q(SEMESTER) CONTINUED EVALUATION			
Typology	Degree	Course	Character	Modality
	Bachelor's Degree in Physiotherapy	4	OPTIONAL	Attendance-based
	Double bachelor's degree: Degree in Nursing and Degree in Physiotherapy	4	COMPULSORY	Attendance-based
Course number of credits (ECTS)	6			
Type of activity, credits, and groups	Activity type	TEORIA		
	Number of credits	6		
	Number of groups	1		
Coordination	FERNÁNDEZ LAGO, HELENA			
Department	NURSING AND PHYSIOTHERAPY			
Teaching load distribution between lectures and independent student work	60% Online classes 40% Individual student work			
Important information on data processing	Consult <a href="#">this link</a> for more information.			
Language	Spanish, Catalan and English			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
FERNÁNDEZ LAGO, HELENA	helena.fernandez@udl.cat	1,5	
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## Subject's extra information

This subject is linked to others that work on transversal competences that may include physical activity, such as: Foundations in Sports Physiotherapy; Legislation, Public Health and Health Administration; o Kinesitherapy.

The general objective of this 6 ECTS course is to know and learn how to use therapeutic exercise in chronic pathologies.

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## Learning objectives

O1. Interpret the elements, effects and risks that condition the practice of physical activity in different professional areas.

O2. Understand and evaluate the processes and programs of physical activity in the improvement of chronic pathologies.

O3. Develop adaptation skills to new situations, problem solving and autonomous work.

O4. Establish effective communication with patients, family, social groups and colleagues and promote health education.

O5. Know the role of the physical therapist and other professionals who work in the prescription of physical exercise.

O6. Know how to use the new information and communication technologies.

O7. Develop interpersonal relationship and communication skills.

## Competences

**CE1 Know and understand the morphology, physiology, pathology and behavior of people, both healthy and sick, in the natural and social environment.**

*Learning outcomes:*

1.1 Identify and describe the elements that constitute the morphology of the human being.

1.2 Differentiate each of the components of the human being from its biochemical level to its systemic level, and its possible alterations.

1.4 Identify and describe the general physiology of the elements that make up the human being.

1.7 Understand psychic functions, their alterations and their evolution throughout the life cycle.

1.8 Identify the psychosocial and environmental factors that influence the recovery process of people.

**CE2 Know and understand the sciences, models, techniques and instruments on which physical therapy is based, articulated and developed.**

*Learning outcomes:*

2.1 Understand the general, basic and own theories of Physiotherapy.

2.3 Cite the basic skills that characterize the figure of the physical therapist.

2.5 Know how to use the most common sanitary terminology among health professionals, applied to the Physiotherapy model.

2.7 Identify, describe and know the theories and general principles of functioning, disability, health and assessment.

2.12 Use the basic techniques of scientific research in Physiotherapy.

**CE3 Know and understand the methods, procedures and physiotherapeutic actions, aimed both at the actual therapy to be applied in the clinic for pre-education or functional recovery, as well as carrying out activities aimed at promoting and maintaining health.**

*Learning outcomes:*

3.1 Present the theoretical foundations on which the different physiotherapeutic methods and procedures are based.

3.2 Recognize the general and specific procedures of Physiotherapy.

3.4 Define the bases of the therapeutic relationship and deal with the different psychosocial intervention techniques that are useful in the Health Sciences.

3.5 Cite the means to encourage user and family participation in the recovery process.

3.7 Identify the physiological and structural changes that may occur as a consequence of the Physiotherapy

intervention.

**CE4 Acquire adequate clinical experience that provides intellectual and technical and manual skills; that facilitates the incorporation of ethical and professional values; and to develop the ability to integrate the knowledge acquired; so that, at the end of the studies, the students know how to apply them both to specific clinical cases in the hospital and out-of-hospital setting, as well as to actions in primary and community care.**

*Learning outcomes:*

4.1 Execute the Physiotherapy intervention plan, using the therapeutic tools of its own, attending to the individuality of the user and incorporating ethical, ethical and legal principles into professional practice.

4.2 Solve clinical cases using the techniques and actions of Physiotherapy.

4.3 Demonstrate, through clinical experience, the ethical and professional values, as well as the knowledge and skills characteristic of Physiotherapy in a hospital and out-of-hospital setting, and in primary and community care.

4.4 Consult and apply the principles that allow clinical reasoning to promote problem solving.

**CE5 Assess the patient's functional state, considering the physical, psychological and social aspects.**

*Learning outcomes:*

5.1 Apply the procedures of assessment and systematic collection of relevant information related to the needs of patients, considering from a global and objective perspective, the physical, psychological and social aspects.

5.2 Treat and receive the patient, collecting and evaluating the subjective data expressed by her and / or significant people in her environment.

5.3 Identify the concepts of functioning and disability in relation to the intervention process in Physiotherapy and describe the alterations, functional limitations and actual and potential disabilities found.

5.4 Perform an assessment of the patient's functional status from the point of view of trauma.

5.5 Perform an assessment of the patient's functional status from the point of view of neurology, urogynecology, cardiology or respiratory physiotherapy.

**CE6 Diagnostic assessment of physiotherapy care according to standards and with internationally recognized validation instruments.**

*Learning outcomes:*

6.1 Carry out a functional diagnosis of Physiotherapy based on the analysis and critical interpretation of the information collected and related to the evaluation of Physiotherapy and with the complementary information.

6.2 Distinguish the different diagnostic techniques in the pathologies of the different devices and systems.

6.3 Apply the procedures and assessment instruments in Physiotherapy interpreting electrical and manual tests to determine results in the different specialties of Physiotherapy.

6.4 Identify and use internationally recognized and validated assessment instruments

**CE7 Design the physiotherapy intervention plan according to criteria of adequacy, validity and efficiency.**

*Learning outcomes:*

7.1 Define the general and specific objectives for the application of physiotherapeutic treatment.

7.2 Design therapeutic exercises for the treatment of orthopedic, trauma, rheumatology and sports pathologies and injuries.

7.7 Critically analyze clinical situations to develop a good intervention plan based on criteria of adequacy, validity

and efficiency.

7.8 Prepare the environment in which the Physiotherapy sessions will be carried out so that it adapts to the needs of the patient.

**CE8 Execute, direct and coordinate the physiotherapy intervention plan, using its own therapeutic tools and attending to the individuality of the user.**

*Learning outcomes:*

8.1 Carry out the specific physiotherapy treatment techniques in the patient, according to the different pathologies, and apply the intervention procedures on her and her environment.

8.2 Know how to apply other specific, alternative or complementary manual therapies related to the field of competence of Physiotherapy.

**CE9 Evaluate the evolution of the results obtained with the treatment in relation to the objectives set.**

*Learning outcomes:*

9.1 Identify and describe the main changes produced as a consequence of the different treatments applied.

9.3 Identify the need to rethink the intervention plan based on the evolution results obtained.

**CE12 Intervene in the fields of health promotion, prevention, protection and recovery.**

*Learning outcomes:*

12.2 Select and execute the general physiotherapeutic procedures that are applied to the different pathologies of the human body in the periods of health promotion and conservation, as well as in the prevention of the disease.

12.4 Prevent and avoid possible risks derived from the application of physiotherapy treatment.

**CE14 Carry out physiotherapeutic interventions based on comprehensive health care involving multiprofessional cooperation, integration of processes and continuity of care.**

*Learning outcomes:*

14.2 Integrate and collaborate with the different interdisciplinary professional teams.

14.3 Offer efficient Physiotherapy care, providing comprehensive, continuous and quality care to patients, showing respect for the diversity and plurality of ideas, people and situations.

**General competences of the Degree:**

CG1 Communicate effectively and clearly, both orally and in writing, with users of the healthcare system as well as with other professionals

CG2 Know how to work in professional teams as a basic unit in which the professionals and other staff of healthcare organizations are structured in a single or multidisciplinary and interdisciplinary way.

CG3 Incorporate the ethical and legal principles of the profession into axial professional practice such as integrating social and community aspects in decision-making.

**Transversal competences of the Degree:**

CT4 Respect for the fundamental rights of equality between men and women, the promotion of Human Rights and the values proper to a culture of peace and democratic values.

**Strategic competences of the University:**

CEUdL1 Adequate oral and written comprehension and expression of Catalan and Spanish;

CEUdL2 Significant command of a foreign language, especially English;

CEUdL3 Training in the use of new technologies and information and communication technologies;  
 CEUdL4 Basic knowledge of entrepreneurship and professional environments;  
 CEUdL5 Essential notions of scientific thought.

## Subject contents

### Unit 1. Systematization of Physical Exercise

- Contextualization
- Principles of Therapeutic Physical Training
- Training Basics: Adaptation
- Physical abilities
- Components of Exercise Load

### Unit 2. Prescription of Therapeutic Exercise

- Benefits of physical activity and therapeutic exercise
- Precautions to be taken into account when practicing therapeutic exercise
- Medical Functional Assessments- (VFME)
- Therapeutic Exercise Dosage
- Individualized Therapeutic Exercise Program (PEFI)
- The session

### Unit 3. Prescription of therapeutic exercise according to different conditioning factors: Chronic pathologies and/or Groups with special needs.

- Therapeutic Exercise in Locomotor System
- Therapeutic Exercise in Cardiovascular System
- Therapeutic Exercise in Respiratory System
- Therapeutic Exercise in Metabolic Diseases
- Therapeutic Exercise in Women's Health.
- Therapeutic Exercise in Oncology
- Therapeutic Exercise in Neurology
- Therapeutic Exercise in Geriatrics
- Therapeutic Exercise in Rheumatology

## Methodology

Description	Activity	Hours of on-site work online	Hours of off-site work
Presentation of the subject. UdP1	Participatory classes, debates and virtual forums, works, readings	6 h	4 h
UdP2	Participatory classes, debates and virtual forums, works, readings	12 h	8 h
UdP3	Participatory classes, debates and virtual forums, works, readings	42 h	32 h

Transversal contents to all the UdP	Practical sessions, participation in scientific conferences.		
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## Development plan

Classroom teaching

Theoretical-practical seminars

Participative classes (presenting cases, solutions to doubts, forums, and debates).

Complementary practical/collaborative activities (approach and resolution of clinical cases, portfolio, reading and discussing scientific papers, etc.).

## Evaluation

	Evaluation Activities	Criteria	%	O/V <sup>1</sup>	I/G <sup>2</sup>	Comments
O1 a O5	Theoretical block	Multiple-choice test and short questions	50	O	I	The call will be published on the virtual campus.
O1 a O7	Group work	Document to be submitted within the established deadline (40%) + Practical examination of the content of the work (60%).	35	O	I / G	The call will be published on the virtual campus.
O1 a O7	Participation and individual work block	Participation block Interventions that include relevant, substantiated and original contributions to the content being worked on.	15	O	I	

1 Mandatory / Voluntary

2 Individual / Group

This subject follows the UdL evaluation regulations.

### CONTINUOUS ASSESSMENT

To pass this course, you must obtain a global grade 5. In order to make the weighted average of the marks obtained in the different blocks, it is essential that all of them are approved.

- The theoretical block will be evaluated at the end of the term with a theoretical exam to check the achievement of the content worked during the course. In order to pass this block you must have a score of 5. Both the theoretical exam at the end of the course and the recovery exam will consist of 30 multiple-choice questions (4 possible answers, of which only one will be true, with a discount of 0.25 for error) and 2 short questions. The multiple-choice questions will have a weight of 60%, while the short questions will have a weight of 40%.
- The group work block: elaboration of a final paper. A score of 5 must be obtained in the final paper (40% written document + 60% practical exam of the content of the work).
- The block of individual work and participation includes interventions during the classroom sessions and in the virtual campus forums. The continuous assessment block requires 80% of the delivery of complementary activities.



- 80% class attendance is obligatory.

## ALTERNATIVE EVALUATION

The alternative evaluation consists of the completion of a final written test of the theoretical content of the subject shown in this teaching guide (50%), together with the delivery of a final individual written work accompanied by a practical exhibition. The day of the delivery and the practical presentation will be specified well in advance on the virtual campus.

## ABSENCE JUSTIFICATION OF THEORETICAL-PRACTICAL SUBJECTS

In relation to absence justifications, the reasons for which the absence is considered to be justified, will be the same as those stated in the Regulations for Assessment and Qualification of Teaching in Degrees and Masters at the UdL for failure to attend the assessment tests scheduled in the teaching guide or on the degree website.

For the rest of situations derived from health, personal or family problems, the student will be allowed to change the day and recover the seminar during the week, if possible.

Justification or absence requests that entail failure to appear for an evaluation test must be submitted on the same absence day. The rest absence justifications must be submitted within the following 10 days.

In general, the student will only be excused the absence, but not the lack of compliance with their academic commitments.

## Bibliography

1. American College of Sports Medicine. ACSM's Guidelines for Exercise Testing and Prescription. 9th ed. Thompson WR, Gordon NF, Pescatello LS, editors. Philadelphia: Lippincott Williams & Wilkins; 2014.
2. Departament de Salut. Generalitat de Catalunya. Guia de prescripció de l'exercici físic per a la salut (PEFS). Barcelona: Direcció General de Salut Pública, Secretaria General de l'Esport; 2007.
3. Ministerio de Educación Cultura y Deporte, Agencia Española de Protección de la Salud en el Deporte. Actividad física y prevalencia de patologías en la población española. Madrid: Subdirección General de Documentación y Publicaciones; 2016. 29 p.
4. Ministerio de Sanidad Servicios Sociales e Igualdad. Actividad Física para la Salud y Reducción del Sedentarismo. Recomendaciones para la población. Estrategia de Promoción de la Salud y Prevención en el SNS. Madrid: 2015.
5. World Health Organization. Global Recommendations on Physical Activity for Health. Geneva: WHO; 2010.
6. Physical Activity Readiness Questionnaire <http://eparmedx.com/>
7. Pla d'activitat física, esport i salut <http://www.pafes.cat/>