



Universitat de Lleida

DEGREE CURRICULUM  
**BACHELOR'S THESIS**

Coordination: SOLÉ CASES, SÍLVIA

Academic year 2021-22

## Subject's general information

|   |   |               |                  |                  |
|---|---|---------------|------------------|------------------|
| <b>Subject name</b>   | BACHELOR'S THESIS   |               |                  |                  |
| <b>Code</b>   | 102730  |               |                  |                  |
| <b>Semester</b>   | UNDEFINED   |               |                  |                  |
| <b>Typology</b>   | <b>Degree</b>   | <b>Course</b> | <b>Character</b> | <b>Modality</b>  |
|   | Bachelor's Degree in Physiotherapy  | 4             | COMPULSORY       | Attendance-based |
|   | Double bachelor's degree: Degree in Nursing and Degree in Physiotherapy                     | 5             | COMPULSORY       | Attendance-based |
|   | Double bachelor's degree: Degree in Physical Activity and Sports Sciences and Physiotherapy | 5             | COMPULSORY       | Attendance-based |
|   | Double bachelor's degree: Degree Physiotherapy and Degree in Human Nutrition and Diethetics | 5             | COMPULSORY       | Attendance-based |
| <b>Course number of credits (ECTS)</b>  | 12  |               |                  |                  |
| <b>Type of activity, credits, and groups</b>                                    | <b>Activity type</b>  | TFG           |                  |                  |
|   | <b>Number of credits</b>  | 12            |                  |                  |
|   | <b>Number of groups</b>   | 1             |                  |                  |
| <b>Coordination</b>   | SOLÉ CASES, SÍLVIA  |               |                  |                  |
| <b>Department</b>   | NURSING   |               |                  |                  |
| <b>Teaching load distribution between lectures and independent student work</b> | Lecture and participatory classes (10%)<br>Self-employment (90%)                            |               |                  |                  |
| <b>Important information on data processing</b>                                 | Consult <a href="#">this link</a> for more information.                                     |               |                  |                  |
| <b>Language</b>   | Catalan, Spanish, or English  |               |                  |                  |

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## Subject's extra information

### Contextualization

The final project is a compulsory subject in the final year of the degree program consisting of the preparation, presentation and defense in front of a court of a final degree project, defined as an integration exercise of the training content received and the skills acquired throughout the degree. Therefore, students will do literature search related to the chosen subject and will extract and relate the information necessary to prepare a new written document written.

### Prerequisites

Prerequisites for enrollment:

- For the development and defense of the TFG, the student must have basic and compulsory subjects approved, to have acquired knowledge of the degree.
- However, it is accepted that students who have outstanding 6 ECTS compulsory or basic subjects from first or second semester courses, can enroll in the regular period (see prerequisite for evaluation).
- Students who are suspended in more than 6 ECTS corresponding to compulsory or basic subjects may not enroll in the TFG. They could enroll in the course when they meet the prerequisites established.

Evaluation prerequisite for the submission process and TFG reading:

- It is prerequisite for qualification to have all approved subjects. Students who do not pass the compulsory and basic subjects pending, may not be evaluated from TFG and the qualification will be 'not presented'. They could re-enroll the following year.

### Corequisites

Are not established

## Learning objectives

1. Design planning, quality improvement, organization and management in the field of competence of the profession, an ethical commitment to integrating different disciplines.
2. Develop critical thinking and student communication skills.
3. Promote the use of appropriate scientific vocabulary of the field for the presentation and communication of works in specialized forums.
4. Incorporating the design and / or evaluation of a physiotherapy intervention plan, which collects the ability to

make decisions and problem solving, all with a critical and inclusive spirit of teamwork and based on scientific evidence.

5. Incorporate research and evidence-based practice as part of the professional culture of the physiotherapist.

## Competences

### **General competences of the Degree:**

CG1 Communicate effectively and clearly, both orally and in writing, with health system users and with other professionals

CG3 Incorporate ethical and legal principles of the profession to practice as axial integrate social and community aspects in decision-making.

CG4 correction in oral expression written.

CG5 domain of a foreign language.

CG6 domain of ICT

### **Specific powers of the Certification and Learning Outcomes:**

EC1 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 constituting the morphology of the human being.

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

1.3 Recognize the elements of the morphology of the human being by practicing palpation of living subjects

1.4 Identifying and describing the general physiology of the elements of the human being.

1.5 Differentiating possible physical behavior of tissues and biomaterials

1.6 Understanding the normal functioning of every organ and system and possible functional alterations.

1.7 Understanding the psychic functions, changes and developments 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 it is based, articulated and developed physiotherapy.

Learning outcomes:

2.1 Understand the general, basic and physiotherapy own theories.

2.2 Define the concept of Physiotherapy and its evolution throughout history

2.3 List the basic skills that characterize the figure of the physiotherapist.

2.4 Understand the principles and theory of biophysics applied to the biomechanics of the human body.

2.5 Knowing how to use the most common medical terminology among health professionals, physiotherapy applied to the model.

2.6 Describe the principles, theories and physical basis of physical agents in the professional activity of physiotherapy

2.7 Identify, describe and understand the theories and general principles of functioning, disability, health and valuation.

2.8 Explain and describe the factors that influence the application of proper physical agents of physiotherapy.

2.9 Describe the administrative context in which the physiotherapy and the various forms that health management and health care in Spain and in the Community falls.

2.10 Identify the organizational context in which physiotherapy is part of the nature of professional associations and associations as well as the Code of Ethics of the Professional Associations.

2.11 Explain the general concepts of law and accountability, possible civil or criminal problems with the profession. Health and labor legislation.

2.12 Using the basic techniques of scientific research in Physical Therapy

CE3 Know and understand the methods, procedures and physiotherapy activities, aimed at both the said actual therapeutic to be applied in the clinic for preeducación or functional recovery, as well as carrying out activities aimed at the promotion and maintenance of health.

Learning outcomes:

3.1 Exposing the theoretical foundations on which the different methods and procedures are based physiotherapy

3.2 Recognize the general and specific procedures specific to physiotherapy.

3.3 Understand and apply physical agents as a basis of therapeutics physiotherapy.

3.4 Define the basis of the therapeutic relationship and treat different psychosocial intervention techniques that are useful in the Health Sciences.

3.5 Quote the means to promote participation and family in the recovery process

3.6 Use and interpret basic physiological tests such as stress testing, ongoing study, spirometry, and esfingomanometría.

3.7 Identify the physiological and structural changes that may occur as a result of the intervention of physiotherapy

CE5 assess the functional status of the patient, considering the physical, psychological and social aspects.

Learning outcomes:

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

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

CE6 diagnostic evaluation physiotherapy care according to the norms and validation instruments internationally recognized.

Learning outcomes:

6.2 Distinguish different diagnostic techniques in pathology of different organs and systems

6.3 Apply the procedures and instruments valuation Physiotherapy performing electrical tests and manuals to determine results in different specialties of physiotherapy

6.4 Identify and use valuation tools internationally recognized and validated.

EC7 Designing the physiotherapy intervention plan according to criteria of adequacy, validity and efficiency.

Learning outcomes:

7.1 Define the general and specific objectives for the implementation of physical therapy

7.2 Design therapeutic exercises for the treatment of diseases and orthopedic, orthopedic, rheumatologic and sports injuries

7.3 Choosing kinesiterapia procedures, mobilization, manipulation, massage therapy or other characteristics of physiotherapy techniques that are most suitable according to the pathology presented

7.4 Raising the physical media suitable therapeutic electrotherapy, vibrotherapy, thermotherapy, hydrotherapy, for prevention or recovery of pathologies

7.5 Describe the physiotherapy intervention plan for the different specialties of neurology, urogynecology, cardiology and respiratory physiotherapy.

7.6 Designing the intervention plan in the field of geriatric physical therapy, depending on the type of patient presenting.

7.7 Critically analyze clinical situations to develop a good plan of action based on criteria of adequacy, validity and efficiency.

7.8 Prepare the environment in which will be implemented in physiotherapy sessions to suit the patient's needs.

EC8 Run, direct and coordinate the physiotherapy intervention plan, using their own therapeutic tools and considering the individuality of the user.

Learning outcomes:

8.1 Perform the specific techniques of physical therapy in the patient, according to the different pathologies, and implement procedures work on it and on its environment.

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

EC9 evaluate the evolution of the results obtained with treatment in relation to the objectives.

Learning outcomes:

9.1 Identify and describe the major changes resulting from the different treatments applied

9.2 Evaluate the patient's progress in terms of the objectives set previously

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

9.4 Contrasting valuation data obtained before and after therapeutic intervention.

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

Learning outcomes:

12.1 Identify and describe the basic principles of prevention, as well as various medical and surgical applicable to each type of pathology treatments.

12.2 Select and run the general physiotherapy procedures that apply to the different pathologies of the human body during periods of promotion and maintenance of health and prevention of disease.

12.3 Promote through health education healthy lifestyle habits based on performances physiotherapy

12.4 Prevent and avoid the potential risks arising from the application of physical therapy

12.5 Design and develop social and health campaigns and educational outreach: physiotherapy programs at school and in different professional fields School programs Back, etc.

CE13 participate in the preparation of physiotherapy care protocols based on scientific evidence, promoting professional activities that stimulate research in physiotherapy.

Learning outcomes:

13.1 Incorporate scientific research and evidence-based practice as a professional culture and establish research in the field of competence of the profession.

13.2 Using the scientific method through programs of basic and applied research.

13.3 Using the qualitative and quantitative methodology applied to professional activity respecting the ethical aspects and know to apply it to the profession.

13.4 Identify and use the possibilities offered by new technologies in the management and treatment of quantitative information.

13.5 Describe and analyze physiotherapy care protocols based on evidence, applied to the different branches of the same.

13.6 Disseminate evidence-based practice and research and its findings in the scientific and professional community.

13.7 Establish physiotherapy care protocols based on scientific evidence and practice to encourage all those professional activities that share the revitalization of research in physiotherapy.

CE15 Understand the importance of updating the knowledge, skills and attitudes that make up the professional skills of the physiotherapist.

Learning outcomes:

15.1 Promote updating and recycling of knowledge, skills, and attitudes of professional skills through a process of ongoing formation.

15.2 Understand, select and defend research new designs and methods appropriate for physiotherapy.

15.3 Interpret, analyze, synthesize and criticize research findings related to physiotherapy and future expansion lines.

15.4 Assess the need to investigate and find publications related to physiotherapy and formulate relevant research questions.

15.5 Demonstrate skills in the search itself, critical examination and integration of scientific literature and other relevant information.

15.6 Present and defend before a university tribunal a project EOG, consisting of an integration exercise training content received and the skills acquired.

15.7 Disseminate research findings relevant to future scientific evaluation.

15.8 Participate in the development and delivery of educational programs related to physiotherapy for professionals, interdisciplinary and / or to the population and general groups.

### **Transversal competences of the Degree:**

CT1 correction in oral expression written.

CT2 domain of a foreign language.

CT3 domain of ICT

### **University strategic skills:**

CEUdL1 comprehension and oral and written Catalan and Castilian expression;

CEUdL2 significant domain of a foreign language, especially English;

CEUdL3 Training in the use of new technologies and information and communications technology;

CEUdL4 Basic knowledge of entrepreneurship and professional environments;

CEUdL5 Essentials of scientific thought.

## Subject contents

1. Extension of any of the subject degree by the literature search and scientific reading.
2. Design and preparation of a paper on the topics studied.
3. Delivery of memory made where the subject and the preparation process and methodology used are described.
4. Oral presentation of the work in public defense before a university tribunal.

## Methodology

The teaching methodology is based on the following aspects:

- Written work
- Problem-based learning / resolution clinical cases
- Oral presentation of work
- Personalized tutoring

## Development plan

### **Designation of the tutor:**

- At the beginning of the course will be facilitated through the Virtual Classroom the list of teachers who participate in the course.
- The student may choose to perform teacher mentoring and evaluation of track work. Such election shall be held at the beginning of the course, in strict order of average grade of the academic record.
- Coordination and / or teacher in question has the right to make changes in the appointment of students adhering to ethical issues of teaching quality.

**Topic work:**

The theme of the work will be a free choice of the student, but the tutor will have power to cancel or not accept it if it deems inappropriate. In any case, the teacher-student seek consensus, and the tutor will never impose a topic the student with whom he does not agree.

**Type of work:**

The work should be structured according to the scientific method and can rotate around one of the following options, but with a variable focus:

- Investigation project
- Review work

All information concerning the structure and preparation work will be provided in the Virtual Classroom at the beginning of the course.

## Evaluation

| Evaluation activities |  | Criteria  | %  | M/V (1) | I/G (2) |
|-----------------------|--|---|----|---------|---------|
| Tutor assesment       | Progress monitoring and Labour Development | 3 deliveries, specific headings for each                    | 20 | M       | I       |
|                       | Final work                                 | Final delivery in the Virtual Classroom<br>Specific heading | 40 | M       | I       |
| Court assesment       | Evaluation of written work                 | Specific heading  | 20 | M       | I       |
|                       | Evaluation of the oral defense             | 15 min exposure<br>10 min questions<br>Specific heading     | 20 | M       | I       |

(1) Mandatory / Voluntary Work

(2) Individual work / Group

- There will be two distinct periods of evaluation: the extraordinary call in February, and the ordinary call in June. The delivery of the work will be different depending on the call, so the timing of the preparation should be consulted at the Bachelor's thesis guide, which will be found in the virtual campus at the beginning of the subject. There will be no difference in the type of evaluation or headings used between the different calls.
- The subject is approved with a minimum grade of 5 out of 10, being the result of the sum obtained between tutor assessment and evaluation of the court, with the corresponding percentage. It is imperative that both parts are approved to pass the whole subject.
- The final delivery of the work will be done in the virtual platform. The delivery will be strict and if it is not met, the work is automatically suspended and can not be filed with the court.
- The entries with the criteria for the assessment of written work, as well as for the evaluation of the oral presentation, will be in the virtual campus at the beginning of the course.

## Bibliography

### Basic:

- Cobo E, Muñoz P, González JA. Bioestadística para no estadísticos. Barcelona: Masson; 2007.
- Duarte G. Buscando información: los fundamentos y los instrumentos. Tarragona: Lidervet; 2007.
- Jiménez J., Argimon J.M., Martín A., Vilardell M., Publicación Científica Biomédica. Como escribir y publicar un artículo de investigación. Barcelona: Elsevier España, S.L. 2010
- Martínez López FJ, Luna P, Fernández Carrión R. Internet para investigadores. Huelva: Universidad de Huelva; 1997.
- Moore DS. Estadística aplicada básica. 2ª ed. Barcelona: Antoni Bosch; 2005.
- Ruiz JI, Aristegui I, Melgosa L. Cómo elaborar un proyecto de investigación social. Bilbao: Universidad de Deusto; 1998.
- Wonnacott TH, Wonnacott R. Introducción a la estadística. 5a ed. México: Limusa; 1999.

### Recommended

- Argimón JM, Jimenez J. Métodos de investigación aplicados a la atención primaria de salud. Barcelona: Doyma; 1991.
- Requisitos uniformes de los manuscritos enviados a revistas biomédicas. [página a internet]. A Coruña: Fisterra.com; 2002. [actualitzat el 12/02/09; citat el 13/04/11]. Disponible a: [http://www.fisterra.com/recursos\\_web/mbe/vancouver.htm](http://www.fisterra.com/recursos_web/mbe/vancouver.htm)
- Sobrido M, González C, Ribes MF. Los sellos de calidad y las acreditaciones externas. En: X Jornadas Nacionales de Información y documentación en Ciencias de la Salud. Málaga: Hospital Regional Universitario Carlos Haya; 2003.
- Tramullas J, Olvera M. Recuperación de la información en Internet. Madrid: Ra-Ma; 2001