



Teaching Guide

Teaching Guide				
Identifying Data				2023/24
Subject (*)	FINAL DISSERTATION		Code	651G01034
Study programme	Grao en Fisioterapia			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	Fourth	Obligatory	6
Language	SpanishGalicianEnglish			
Teaching method	Face-to-face			
Prerequisites				
Department	Fisioterapia, Medicina e Ciencias Biomédicas			
Coordinador		E-mail		
Lecturers	Amado Vazquez, Maria Eugenia Barcia Seoane, Miriam Bello Rodriguez, Olalla Carballo Costa, Lidia Chouza Ínsua, Marcelo Fernandez Cervantes, Ramon Giménez Moolhuyzen, Esther Gonzalez Doniz, Maria Luz López García, Asenet Martinez Bustelo, Sandra Martinez Rodriguez, Alicia Martínez Toledo, Beatriz Meilán Devesa, José Ramón Menéndez Pardiñas, Mónica Naia Entonado, Zeltia Ortigueira Garcia, Serafin Paseiro Ares, Gustavo Patiño Nuñez, Sergio Pose Gontad, Alba Ramos Gómez, Fernando Raposo Vidal, Isabel Rivas Neira, Sabela Robles García, Verónica Rodriguez Romero, Beatriz Sanesteban Hermida, Yolanda Seijo Ares, Andrea Senin Camargo, Francisco José Souto Camba, Sonia Souto Gestal, Antonio Vilanova Pereira, María Viñas Diz, Susana Vivas Costa, Jamile	E-mail	maria.eugenia.amado@udc.es miriam.barcia.seoane@udc.es olalla.bello@udc.es lidia.carballo@udc.es marcelo.chouza@udc.es ramon.fcervantes@udc.es e.moolhuyzen@udc.es luz.doniz@udc.es asenet.lopezg@udc.es s.martinez1@udc.es alicia.martinez@udc.es b.mtoledo@udc.es jose.meilan@udc.es monica.menendezp@udc.es zeltia.naia@udc.es serafin.ortigueira@udc.es gustavo.paseiro@udc.es sergio.patino@udc.es alba.poseg@udc.es fernando.ramos@udc.es isabel.raposo.vidal@udc.es sabela.rivas@udc.es veronica.robles@udc.es beatriz.romero@udc.es y.sanesteban@udc.es a.sares@udc.es francisco.senin@udc.es sonia.souto@udc.es antonio.souto@udc.es maria.vpereira@udc.es susana.vinas.diz@udc.es j.vivas@udc.es	
Web	http://www.ffisacademica.udc.gal/p/traballo-fin-de-grao.html			



General description	The subject Final Degree Dissertation is compulsory and involves a total load of 6 ECTS that are generally planned in the 2nd four-month period of the 4th year of the syllabus of the Bachelor's Degree in Physiotherapy. The UDC establishes that students can register for the TFG subject as long as they have a maximum of 78 credits left to finish their studies, including the credits corresponding to the Final Degree Project. For the defence and grading of the TFG it is essential that the student has passed all the ECTS credits of the degree, with the exception of the TFG itself. The TFG subject involves the completion, individually by each student, under the supervision of a director assigned by the Centre, of one of the activities described in point 2.5 of the TFG Regulations of the Faculty of Physiotherapy of the UDC (i.e. Literature review, Research project, Research work, Real clinical case or Learning and service experience). The TFG must be a reflection of the knowledge and competences acquired by the student during the teaching period of the Degree in Physiotherapy. These competences are set out in ORDER *CIN/2135/2008, of 3 July, which establishes the requirements for the verification of official university degrees that enable students to practise the profession of physiotherapist.
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Study programme competences	
Code	Study programme competences
A1	Coñecer e comprender a morfoloxía, a fisioloxía, a patoloxía e a conduta das persoas, tanto sas como enfermas, no medio natural e social.
A2	Coñecer e comprender as ciencias, os modelos, as técnicas e os instrumentos sobre os que se fundamenta, articula e desenvolve a fisioterapia.
A3	Coñecer e comprender os métodos, procedementos e actuacións fisioterapéuticas, encamiñados tanto á terapéutica propiamente dita a aplicar na clínica para a reeducación ou recuperación funcional, como á realización de actividades dirixidas á promoción e mantemento da saúde.
A14	Incorporar os principios éticos e legais da profesión á práctica profesional así como integrar os aspectos sociais e comunitarios na toma de decisións.
A15	Participar na elaboración de protocolos asistenciais de fisioterapia baseada na evidencia científica, fomentando actividades profesionais que dinamicen a investigación en fisioterapia.
A17	Comprender a importancia de actualizar os coñecementos, habilidades, destrezas e actitudes que integran as competencias profesionais do fisioterapeuta.
A19	Comunicarse de modo efectivo e claro, tanto de forma oral como escrita, cos usuarios do sistema sanitario así como con outros profesionais.
B1	CB1 - Que los estudiantes hayan demostrado poseer y comprender conocimientos en un área de estudio que parte de la base de la educación secundaria general, y se suele encontrar a un nivel que, si bien se apoya en libros de texto avanzados, incluye también algunos aspectos que implican conocimientos procedentes de la vanguardia de su campo de estudio
B2	CB2 - Que los estudiantes sepan aplicar sus conocimientos a su trabajo o vocación de una forma profesional y posean las competencias que suelen demostrarse por medio de la elaboración y defensa de argumentos y la resolución de problemas dentro de su área de estudio
B3	CB3 - Que los estudiantes tengan la capacidad de reunir e interpretar datos relevantes (normalmente dentro de su área de estudio) para emitir juicios que incluyan una reflexión sobre temas relevantes de índole social, científica o ética
B4	CB4 - Que los estudiantes puedan transmitir información, ideas, problemas y soluciones a un público tanto especializado como no especializado
B5	CB5 - Que los estudiantes hayan desarrollado aquellas habilidades de aprendizaje necesarias para emprender estudios posteriores con un alto grado de autonomía
C1	Adequate oral and written expression in the official languages.
C2	Mastering oral and written expression in a foreign language.
C3	Using ICT in working contexts and lifelong learning.
C4	Acting as a respectful citizen according to democratic cultures and human rights and with a gender perspective.
C6	Acquiring skills for healthy lifestyles, and healthy habits and routines.
C7	Developing the ability to work in interdisciplinary or transdisciplinary teams in order to offer proposals that can contribute to a sustainable environmental, economic, political and social development.
C8	Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.



C9	Ability to manage times and resources: developing plans, prioritizing activities, identifying critical points, establishing goals and accomplishing them.
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Learning outcomes			
Learning outcomes	Study programme competences		
Ability to adequately understand and express, orally and in writing, in the official languages of the Autonomous Community or in English, contents and reports within the technical scientific context of their discipline.	A19	B1 B2 B3 B4	C1 C2 C6
Ability to use appropriate technical vocabulary specific to physiotherapy.	A19	B2 B3 B4	C1 C2
Ability to structure, analyse, critically reason, synthesise and present complex ideas and theories.	A1 A2 A3	B2 B3	C4 C6
Ability to work responsibly, in an organised and planned manner, incorporating the ethical and legal principles of the profession.	A14	B5	C7 C9
Mastery of the basic ICT tools and sources of documentation specific to the field of health and, in particular, Physiotherapy.	A15 A17	B1 B3 B5	C3 C9
Ability to manage information and knowledge in their disciplinary field.	A1 A2 A3 A17	B1 B2 B3 B4 B5	C8 C9
Development of basic research skills.	A14 A15 A17	B1 B3 B4 B5	C7 C8 C9

Contents	
Topic	Sub-topic



The Final Degree Dissertation may adopt one of the following modalities:

1. Bibliographic review: this modality aims to describe in an up-to-date manner the state of knowledge of a specific area of the reality of health research.
2. Research project: the purpose is to provide useful and applicable information for the development of a novel research project.
3. Research study: the aim is to communicate the original results derived from the research process carried out by the student. A pilot study will be accepted as part of this type of dissertation.
4. Real clinical case: this involves the exploration, intervention and monitoring of a real clinical case, where the student can demonstrate the competences acquired throughout his/her training process.
5. Learning and service experience: this is an educational proposal that combines learning and community service processes in a single, well-articulated project in which participants learn by working on real needs in their environment with the aim of improving it. In short, service-learning is a method for combining social commitment with the learning of knowledge, skills, attitudes and values. Learning to be competent by being useful to others (http://www.udc.es/ocv/Aprendizaxe_servizo/).

In turn, the topic of the Final Degree Dissertation may be freely chosen by the student, as long as it refers to any of the training contents included in the subjects of the syllabus of the Degree in Physiotherapy, in accordance with the competences set out in ORDER CIN/2135/2008, of 3 July.

However, for organisational purposes, the following lines of work are proposed:

1. Neurological physiotherapy.
2. Sports physiotherapy.
3. Diagnosis and physiotherapy intervention in the main dysfunctions of the ankle-foot complex: reliability, validity and efficacy.
4. Biomechanical analysis of movement. Gait rehabilitation in neurological problems. Motor control. Physical exercise and sports injuries.
5. Management of scientific evidence in Physiotherapy. Nutrition in Physiotherapy.
6. Physiotherapy in the elderly.
7. Respiratory physiotherapy in diseases of the respiratory system and other clinical processes.
8. Obstetric and urogynecological physiotherapy.
9. Physiotherapy in disease prevention and health promotion.
10. Physiotherapy in traumatology.
11. Biomechanical analysis of movement.
12. 3D treatment of scoliosis using the FED method.
13. Physiotherapy in dysfunctions of the neuro-musculo-skeletal system.
14. Physiotherapy in pathologies related to lymphedemas and vascular problems.
15. Neurophysiological effects of Manual Therapy.
16. Peripheral nervous system.
17. New|Emerging therapeutic strategies in the evaluation and treatment of Parkinson's disease. Neurophysiological evaluation of motor system fatigue.
18. Epidemiology, prevention and active management of musculoskeletal pain (MSP). Impact of MSP on health-related quality of life (HRQoL).
19. Temporomandibular joint dysfunction.
20. Morpho-functional analysis of the musculoskeletal system by ultrasound scanning. Physiotherapy in dysfunctions of the neuro-musculoskeletal system.
21. Electrotherapy in Physiotherapy.
22. Aquatic rehabilitation. Neuroscience applied to rehabilitation.
23. Physiotherapeutic intervention in children with neurological pathology.



The subject Final Degree Project has been assigned 6 ECTS credits, equivalent to 150 hours of work for the student.

The face-to-face activity is represented by 13 hours distributed as follows:

- 2 hours correspond to the initial seminar with the academic responsible of the subject where the different procedures related to the subject are explained (election of the director, regulations, work modalities, delivery of the TFG,...) and any doubts that may arise are clarified.

- 10 hours distributed throughout the second four-month period will be devoted to face-to-face meetings with the tutor, in order to properly monitor the final dissertation .

- 1 hour corresponds to the oral presentation and defence of the final dissertation before the assessment panel.

The remaining 137 hours correspond to non-face-to-face work by the student: selection of the topic, work schedule and preparation of the TFG and preparation of its presentation and defence.

Planning

Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Oral presentation	A1 A2 A3 A19 B1 B2 B3 B4 C1 C2 C3 C6 C8 C9	1	9	10
Introductory activities	A17 C7	2	0	2
Supervised projects	A1 A2 A3 A14 A15 A17 A19 B1 B2 B3 B4 B5 C1 C2 C3 C4 C6 C7 C8 C9	0	128	128
Personalized attention		10	0	10
(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.				

Methodologies

Methodologies	Description
Oral presentation	Intervention inherent to the teaching-learning processes based on verbal presentation through which students and teaching staff interact in an orderly manner, raising questions, making clarifications and presenting topics, work, concepts, facts or principles in a dynamic way. Students will defend their Final Dissertation before a panel composed of 3 members: President, Secretary and Vocal Member. The presentation will have a maximum duration of 10 minutes, after which the student will be at the disposal of the panel to clarify, answer or go into any questions that may be requested.



Introductory activities	Activities that are carried out before starting any teaching-learning process in order to find out the competences, interests and/or motivations that students possess in order to achieve the objectives to be attained, linked to a training programme. The aim is to obtain relevant information that will enable teaching to be articulated in order to promote effective and significant learning, based on the students' prior knowledge. The purpose of this 2-hour seminar is to inform enrolled students of the regulations for the preparation of the TFG, the relevant dates and timing, the application process for the director and the choice of the specific subject, the different preparation methods envisaged, the assessment system and criteria, as well as to answer any possible doubts regarding the subject. This seminar will be given by the lecturer responsible for the academic management of the TFG subject, in this case the Academic Secretary.
Supervised projects	Methodology designed to promote autonomous learning by students, under the guidance of the teacher and in a variety of scenarios (academic and professional). It is primarily concerned with learning "how to do things". It is an option based on students taking responsibility for their own learning. This teaching system is based on two basic elements: independent learning by students and the monitoring of this learning by the professor-tutor. In turn, the tutored work methodology may include the use, alone or in combination, of other teaching methodologies such as Analysis of documentary sources, learning and service or clinical practice, depending on the work modality selected. Each student will be assigned a director for the preparation of their Final Degree Dissertation. The director will be responsible for advising the student and monitoring their work to ensure that they acquire the skills inherent to it, and that it complies with the requirements specified in the regulations. Once the student has finished their Final Degree Dissertation, the director must issue a favourable report so that they can request their defence before the assessment panel.

Personalized attention

Methodologies	Description
Supervised projects Oral presentation	It is important to consult with the director about the progress that is progressively being made in order to receive the necessary guidance in each case, ensuring the quality of the work in accordance with the established criteria. Monitoring will preferably be done on an individual basis by means of virtual or face-to-face tutorials. Personalised attention will be given through telematic means (Microsoft Teams platform, Moodle and email), at the established times and/or upon request by the student.

Assessment

Methodologies	Competencies	Description	Qualification
Supervised projects	A1 A2 A3 A14 A15 A17 A19 B1 B2 B3 B4 B5 C1 C2 C3 C4 C6 C7 C8 C9	Preparation and timely submission of a final undergraduate project report, consisting of an exercise in integrating the acquired educational content and competencies.	70
Oral presentation	A1 A2 A3 A19 B1 B2 B3 B4 C1 C2 C3 C6 C8 C9	Presentation and defense before the University Tribunal of a final undergraduate project, consisting of an exercise in integrating the acquired educational content and competencies.	30

Assessment comments



The evaluation of the oral presentation and subsequent defence of the Final Degree Project will be carried out by the designated examining board, representing 30% of the final grade. In the same way, this panel will issue a grade for the dissertation report, which will represent 40% of the final grade. Both grades must be justified.

The remaining 30% corresponds to the grade issued by the director of the Final Degree Project at the time of its submission, for which the director's report model provided by the Academic Secretary's Office must be used. This grade must be reasoned, and will assess both the final quality of the Final Degree Project submitted and the student's ongoing assessment.

The requirements for the registration and defence of the TFG will be determined in any case by the current regulations adopted by the University.

PART-TIME ENROLLMENT: There are no different teaching methodologies or evaluation systems contemplated for part-time students.

ACADEMIC EXEMPTION: Given the nature of the subject, the possibility of an academic exemption that exempts students from attending scheduled face-to-face sessions (seminar, tutorials, or oral presentation and defense) is not contemplated.

SECOND OPPORTUNITY: There are no different teaching methodologies or evaluation systems contemplated for the second opportunity.

REPEAT ENROLLMENT: There are no different teaching methodologies or evaluation systems contemplated for students in second or subsequent enrollments.

PLAGIARISM: In the completion of the subject's assignments, plagiarism and the use of non-original material, including material obtained from the internet without proper indication of its source and, if applicable, permission from its author, will be graded as a failure (0.0) for the activity. This is without prejudice to the disciplinary responsibilities that may arise from the corresponding procedure. The fraudulent completion of tests or evaluation activities, once proven, will directly result in a failing grade for the examination in which it occurred: the student will be awarded a grade of "fail" (numerical grade 0) for the corresponding academic term, regardless of whether the offense takes place during the first or second opportunity. In order to do so, the student's grade will be modified in the first opportunity record, if necessary.



Basic	- [PRISMA GROUP] Page, M. J., Moher, D., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., (2021). PRISMA 2020 explanation and elaboration: updated guidance and exemplars for reporting systematic reviews.. BMJ 2021;372:n160 - [CARE Group] Riley, D. S., Barber, M. S., Kienle, G. S., Aronson, J. K., von Schoen-Angerer, T., Tug (2017). CARE guidelines for case reports: explanation and elaboration document. Journal of clinical epidemiology, 89, 218-235. - [CONSORT Group.] Moher D, Hopewell S, Schulz K F, Montori V, Gatzsche P C, Devereaux P J et al. (2012). CONSORT 2010 Explanation and Elaboration: updated guidelines for reporting parallel group randomised trials . BMJ 2010; 340:c869 - Gómez-Conesa, A. (2012). Escala PEDro (traducción y adaptación española). https://www.pedro.org.au/wp-content/uploads/PEDro_scale_spanish.pdf - del Pino Casado, R. & Martínez Riera, J.R. (2022). Manual para la elaboración y defensa del trabajo de fin de grado en Ciencias de la Salud. Barcelona : Elsevier - Renart Pita MA (2004). Escribir en Ciencias Biomédicas. Madrid: Aran Ediciones - Day, Robert A (2008). Cómo escribir y publicar trabajos científicos. Washington : Organización Panamericana de la Salud - Martín Vivaldi, Gonzalo (1993). Curso de redacción del pensamiento a la palabra : teoría y práctica de la composición y del estilo . Madrid : Paraninfo - Vallejo-Nájera, Juan Antonio (2010). Aprender a hablar en público hoy : cómo cautivar y convencer por medio de la palabra . Barcelona : Planeta - García JA, Ponce F, Ramírez Y, Lino L. (2011). Introducción a la metodología de la investigación en ciencias de la salud. Madrid: McGraw-Hill - Polgar, Stephen. (2014). Introducción a la investigación en ciencias de la salud. Barcelona : Elsevier - Ruiz Morales A, Morillo Zárate LE. (2004). Epidemiología clínica: investigación clínica aplicada. Ed. Bogotá: Médica Internacional - Argimon Pallás JM, Jiménez Villa J. (2013). Métodos de investigación clínica y epidemiológica. Ed. Barcelona: Elsevier - Hulley, SB. et al. (2014). Diseño de las investigaciones clínicas. Ed. Barcelona: Lippincott Williams and Wilkins. Wolters Kluwer Health - José Luís R. Martín, Aurelio Tobías Garcés, Teresa Seoane Pillado (2006). El concepto salud a través de la síntesis de la evidencia científica. Toledo : FISCAM - González IF, Urrútia G, Alonso-Coello P. (2011). Revisiones sistemáticas y metaanálisis: bases conceptuales e interpretación. Revista Española de Cardiología 64(8):688-696 - Serrano Gallardo, P (2012). Trabajo fin de grado en ciencias de la salud. Madrid : DAE
Complementary	

Recommendations
Subjects that it is recommended to have taken before
DOCUMENTATION AND HEALTH STATISTICS/651G01028 LEGISLATION AND HEALTH MANAGEMENT/651G01029 COMMUNITY PHYSIOTHERAPY AND PUBLIC HEALTH/651G01030 CLINICAL TRAINING I/651G01035
Subjects that are recommended to be taken simultaneously
CLINICAL TRAINING II/651G01036
Subjects that continue the syllabus
Other comments



The requirements for enrolment and defence of the TFG will be determined in any case by the current regulations adopted by the University. Currently, the UDC establishes that students can enrol in the TFG subject as long as they have a maximum of 78 credits left to complete their studies, including the credits corresponding to the Final Degree Project. For the defence and grading of the TFG it is essential that the student passes all the ECTS of the degree, with the exception of the TFG itself. In order to be able to present and defend the Final Degree Project before the examining board, the student must have passed all the subjects of the degree, with the exception of the Final Degree Project itself. Environmental considerations: in order to help achieve an immediate sustainable environment and comply with the strategic objectives of the Green Campus Plan of the Faculty of Physiotherapy, the documentary work carried out in this subject may be requested in both paper and virtual format or computer support. If the work is to be done on paper, and without prejudice to the requirements established in the Final Degree Project Regulations, the following general recommendations shall be followed as far as possible: - Do not use plastic. - Double-sided printing must be used. - Recycled paper shall be used. - Drafts should be avoided.

(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.