



## Teaching Guide

| Identifying Data           |   |               |  |                | 2017/18   |
|----------------------------|---|---------------|--|----------------|-----------|
| <b>Subject (*)</b>         | Ergonomics, Accessibility, Universal Design and Functional Adaptation   |               |  | <b>Code</b>    | 653G01206 |
| <b>Study programme</b>     | Grao en Terapia Ocupacional   |               |  |                |           |
| Descriptors                |   |               |  |                |           |
| <b>Cycle</b>               | <b>Period</b>   | <b>Year</b>   | <b>Type</b>  | <b>Credits</b> |           |
| Graduate                   | 1st four-month period   | Second        | Obligatoria  | 5              |           |
| <b>Language</b>            | SpanishGalicianEnglish  |               |  |                |           |
| <b>Teaching method</b>     | Face-to-face  |               |  |                |           |
| <b>Prerequisites</b>       |   |               |  |                |           |
| <b>Department</b>          | Ciencias Biomédicas, Medicina e FisioterapiaCiencias da Saúde   |               |  |                |           |
| <b>Coordinador</b>         | Garcia Crespo, Maria Vanessa  | <b>E-mail</b> | m.v.garcia@udc.es                                  |                |           |
| <b>Lecturers</b>           | Garcia Crespo, Maria Vanessa<br>Santos del Riego, Sergio Eduardo  | <b>E-mail</b> | m.v.garcia@udc.es<br>sergio.santos.delriego@udc.es |                |           |
| <b>Web</b>                 |   |               |  |                |           |
| <b>General description</b> | <p>This subject pursues the acquisition and the development of competitions that allow to the students comprise and apply the knowledges related with the ergonomics, accessibility, universal design and functional adaptation with a rehabilitation and occupational perspective.</p> <p>Descriptors:<br/>Foundations of the personal autonomy in the activities of the daily life with and without adaptations and/or products of support. Occupational therapy for the integration of the individual in his surroundings. Application of the occupational activity and ergonomic study.</p> |               |  |                |           |

## Study programme competences

| Code | Study programme competences  |
|------|--|
| A2   | Explicar los conceptos teóricos que sostienen la terapia ocupacional, expresamente la naturaleza ocupacional de los seres humanos y su funcionamiento a través de las ocupaciones. |
| A8   | Uso profesional y ético del razonamiento efectivo en todas las partes del proceso de terapia ocupacional.  |
| A11  | Trabajar para facilitar entornos accesibles y adaptados y promover la justicia ocupacional.  |
| A12  | Colaborar con comunidades para promover la salud y el bienestar de sus miembros mediante la participación en la ocupación.   |
| A19  | Apreciar y respetar las diferencias individuales, creencias culturales, costumbres y su influencia sobre la ocupación y la participación.  |
| B3   | Aplicar un pensamiento crítico, lógico y creativo.   |
| B6   | Comportarse con ética y responsabilidad social como ciudadano y como profesional.  |
| B8   | Capacidad de análisis y de síntesis.   |
| B24  | Habilidades de gestión de la información (habilidad para buscar y analizar información proveniente de diversas fuentes).   |
| B31  | Apreciación de la diversidad y de la multiculturalidad.  |
| C1   | Expresarse correctamente, tanto de forma oral como escrita, en las lenguas oficiales de la comunidad autónoma.   |

## Learning outcomes

| Learning outcomes  | Study programme competences |     |  |
|--|-----------------------------|-----|--|
| Acquisition of the previous theoretical knowledges to the practice on ergonomics, accessibility and universal design.  | A2                          | B31 |  |
| Fundamentación Theoretical of the Occupational Therapy in the intervention on the half: influence of the surroundings on the human occupation.   | A11                         |     |  |
| Acquisition of skills of observation and analysis of the half: evaluation of the conditions of the half social in which the people develop his occupations and of the interaction established between the individual conditionings, the facilitadores/obstaculizadores of the surroundings and the demands of the activity, promoting the half sustainability-environmental. | A11<br>A19                  | B3  |  |



|   |            |           |    |
|---|------------|-----------|----|
| Development of the analytical thought and critic applied to the assessment and to the advice in matter of accessibility: planning of a process structured of intervention (assessment, advice/proposed of improvement, register) and design of favourable and sustainable surroundings to the occupation and potenciadores of the autonomy. | A8<br>A11  | B3        |    |
| Development of skills and technical rigour for the register of the pertinent information of the intervention: development of skills of communication with other professionals and with users, and learning for the preparation of technical reports.  | A11        | B8<br>B24 | C1 |
| Promotion of a social perspective: situate to the student in a type of community intervention, improving the collaboration with other professionals of the field of the social and, in definite, promoting his cooperation to the occupational justice of healthy people in sustainable surroundings.                                       | A11<br>A12 | B6        |    |

| Contents   |   |
|--|---|
| Topic  | Sub-topic   |
| Seminar T-P: Architectural barriers: Project without barriers.<br>Prof. Sergio Santos del Riego.   | Domicile.<br>Buildings and public roads.<br>Transport.<br>Communication.<br>Others.   |
| Unit 1.- Juridical and legal frame of the Accessibility and the Universal Design.<br>Prof. Sergio Santos del Riego.  | Marco xurídico e legal. Conceptos básicos oficiais: Accesibilidade, Deseño Universal, Adaptación Funcional e Ergonomía, e outros.   |
| Unit 2.- The universal social participation in the Environmet.<br>The Universal Design for the Accessibility.<br>Prof. Sergio Santos del Riego.  | Environment: Overview and Concepts.<br>- Accessibility / Environment. European concept.<br>- Middle environmental sustainability.<br>- Types of Environments.<br>- Rating scales accessibility / environment: Housing Enabler.<br>- Symbology accessibility<br>Universal Design: basic principles (Ron Mace).<br>- A Matter of Inclusion.<br>- Visitability and Adaptability.<br>- Health and security.<br>- Universal Design Criteria. |
| Unit 3.- Models inclusivos for the personal autonomy, worthy and independent life. Physical barriers and socioculturales.<br>Discrimination. Other barriers: Social Exclusion versus Social Marginalisation.<br>Prof. Sergio Santos del Riego. | Model Rehabilitador versus Social Model. The union does the strength.<br>Physical barriers and partner-cultural.<br>Sociology of the Inequality.<br>Social marginalisation: historical Concepts, current and according to satisfaction of the needs.<br>Social exclusion.<br>Social exclusion versus social Marginalisation.<br>Social and Cultural barriers.<br>Communities of exclusion/social/disadvantaged marginalisation.         |
| Unit 4.- Accessibility and Sustainable Development .<br>Think Global, Act Local.<br>Prof. Sergio Santos del Riego.   | Sustainable developmental objectives. Diary 2030.<br>United Nations, Europe, Spain and Galicia. Importance of the Objective of the Development of the Millennium and of the Objective developmental Sustainable.<br>New Paradigms.  |
| Unit 5.- Technical of Prevention of labour risks.<br>Prof. Sergio Santos del Riego.  | Prevention of labour risks (PRL):<br>- basic Concepts on seguridady health.<br>- Specialitys of PRL: Security in the work, industrial Hygiene and Ergonomics and Psicosociología applied.   |
| Unit 6.- Domotic and Robotic.<br>Prof. Sergio Santos del Riego.  | Control of the surroundings: Generalities.  |



|  |   |
|--|---|
| Unit 7.- Intervention on the environment from Occupational Therapy. Prof. Vanessa García Crespo.                         | Theoretical argumentation. Influence of the environment on the occupation of the individuals.<br>Methodology of intervention on the environment:<br>- Accessibility<br>- Universal design<br>- Functional adaptation  |
| Unit 8.- Accessibility and universal design as a means of participation.<br>Prof. Vanessa García Crespo                  | Assessment and advice of Occupational Therapy in terms of accessibility of public spaces.<br>- Registration of information: criteria for making a report<br>Criteria of universality in the design of devices and environments.<br>Accessibility vs? Universal design.  |
| Unit 9.- Functional adaptation / reasonable adjustment. Prof. Vanessa García Crespo.                                     | Planning the intervention: assessment and advice from the Occupational Therapy.<br>Design of functional environments in the home.<br>Design of functional environments at work / school.<br>Execution of technical reports.<br>Reasoning applied to practical cases.  |
| Unit 10.- Ergonomics.<br>Prof. Vanessa García Crespo.  | Generalities and concepts.<br>Types of Ergonomics.<br>Labor Ergonomics.   |
| Unit 11.- Planning and ergonomic design of products.<br>Prof. Vanessa García Crespo.                                     | Ergonomic design goals.<br>Recommendations based on anthropometric data.<br>Recommendations based on individual characteristics of individuals.   |
| Unit 12.- Individual-environment-occupation adjustment methodologies applied to the job.<br>Prof. Vanessa García Crespo. | Introduction to adjustment methods for labor and social integration.<br>Analysis of different adjustment methods (LB profiling method, IBV ErgoDis): practice.<br>Application of adjustment methods to Occupational Therapy intervention: functional adaptation of the environment and ergonomic analysis of the workplace. |

| Planning                        |                         |                      |                               |             |
|---------------------------------|-------------------------|----------------------|-------------------------------|-------------|
| Methodologies / tests           | Competencies            | Ordinary class hours | Student?s personal work hours | Total hours |
| Guest lecture / keynote speech  | A2 A8 A19 B3 B31        | 24                   | 30                            | 54          |
| Collaborative learning          | A11 A12 B6 B8 B24<br>C1 | 22                   | 40                            | 62          |
| Mixed objective/subjective test | A8 B3 B8 C1             | 2                    | 0                             | 2           |
| Introductory activities         | A19 B3 B31              | 4                    | 0                             | 4           |
| Personalized attention          |                         | 3                    | 0                             | 3           |

(\*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

| Methodologies                   |   |
|---------------------------------|---|
| Methodologies                   | Description   |
| Guest lecture / keynote speech  | The masterclass is also known like Conference, Exposed method or master lesson. This last modality is used to reserve to a special type of lesson given by a professor in special occasions, with a content that supposes an original preparation and based in the almost exclusive use of the word like road of transmission of the information to the audience. |
| Collaborative learning          | Technician of individual work and public exhibition during the class (GG) and discussion.   |
| Mixed objective/subjective test | It tests that it integrates questions type of proofs of essay and questions type of objective proofs.<br>Regarding questions of essay, collects developmental open questions. Besides, in song objective questions, can combine questions of multiple answer, of ordination, of brief answer, of discrimination, to complete and/or of association.               |



|                         |  |
|-------------------------|--|
| Introductory activities | Activities that carry out before initiating any process of education-learning to end to know the competitions, interests and/or motivations that possesses the students for the attainment of the aims that want to reach , linked to a formative program. It pretends obtain much information that allow to articulate the teaching to favour effective and significant learnings, that split of the previous knowledges of the students. |
|-------------------------|--|

### Personalized attention

| Methodologies          | Description  |
|------------------------|--|
| Collaborative learning | The personalised attention will do , as a whole, by means of interviews personalised direct and virtual, individual and grupal form. |

### Assessment

| Methodologies                   | Competencies            | Description   | Qualification |
|---------------------------------|-------------------------|---|---------------|
| Guest lecture / keynote speech  | A2 A8 A19 B3 B31        | Evaluation with the modality of mixed proof.  | 0             |
| Collaborative learning          | A11 A12 B6 B8 B24<br>C1 | Continuous evaluation:<br>- Rúbrica of the evaluation of the work of the student put professors of the subject.<br>The rúbrica will present to the start of the course.<br><br>- The rúbrica of the evaluation student/professor will value individual works presented by each student in presence of the Big Group (GG) with the presence of both professors.<br>Rúbrica. 5 points (average of both professors on five points) | 50            |
| Mixed objective/subjective test | A8 B3 B8 C1             | Examination:5 points (average of both professors on five points).   | 50            |

### Assessment comments



## EVALUATION OF THE SUBJECT

1.- GENERAL EVALUATION CRITERIA: The final evaluation of the students will be made according to the following criteria: 50% will correspond to the continuous evaluation (5 points) and 50% to the evaluation of the final exam (5 points).

2.-  
CONTINUOUS EVALUATION: The final grade of the continuous evaluation of the student is the average of the two grades, one by Prof. Santos del Riego and another by Profª. Garcia Crespo, on an identical rubric for each teacher (5 points).

In the continuous evaluation, each teacher will independently evaluate what is expressed in the student evaluation rubric by the teacher, namely: - Making the group available documentation of the work to be presented in advance. - The organization and development of the subject (Structure)  
. - The approach of the subject in an innovative and appropriate way to the subject (content) .- Communication skills, information transmission in public and group management (exhibition) .- The integration of the knowledge addressed in The subject and the domain of the proposed theme. The approved in this type of evaluation is set at 2.5 points resulting from the average of the qualifications of both teachers.

3.- EXAMINATION: The final mark of the exam is the average of the part of examination done by each teacher evaluated on five points. It will be held on the date indicated in the official calendar approved at the Faculty Board, and will deal with the content addressed in the subject, both those directed by teachers, and those discussed in the works exposed. The one passed in the exam is set at 2.5 points resulting from the average of the qualifications of both teachers.

4.-  
FINAL QUALIFICATION: The final grade will be the result of the sum of both average marks (continuous assessment and exam), provided that the student reaches the minimum of 2.5 points in each of the final grades (continuous assessment and exam). If this is not the case, the student will be suspended (or not presented, NP, as the case may be) with the qualification determined by the teachers regardless of the final amount obtained.

The qualifications may be reviewed in the terms and forms officially established; The continuous assessment and examination scores of both teachers, if possible, will be jointly reviewed.

The last contextual assessments on the final grades, prior to the formalization in the computer application, is under the consideration of the teacher responsible for the subject.

The final grade of the subject will be expressed according to what is established in article 5 of Royal Decree 1125/2003 of September 5, which establishes the European credit system and the grading system in university degrees of an official nature and Validity throughout the national territory (published in the BOE of September 18, 2003). Grading system: suspended (0-4,9), passed (5-6,9), remarkable (7-8,9), outstanding (9-10), matriculation of honor (graciable).

APPRECIATIONS ON EVALUATION: In the event that the student does not exceed only part of the assessment (continuous assessment or examination): - If the student exceeds the continuous evaluation and suspends the examination, the subject will be suspended (or not presented, NP, as the case may be) ,

But must only be submitted for examination in the following call. - If the student does not pass the continuous assessment and passes the exam, the subject will be suspended (or not presented, NP, as the case may be), but only have to present in the call Following a new work before the court, on the date that the teachers set, within the evaluation period approved in the academic calendar of the Faculty Board, in the shortest possible time from the date of the examination.

If

the student does not pass either of the two parts (continuous assessment and examination), he / she will be presented to both parties in the following call: he / she must carry out a new work and present it to the court on the date that the teachers determine, within the approved evaluation period In the academic calendar of the Board of Faculty, in the shortest possible time from the date of examination. Likewise, it must also be submitted to the official examination on the date indicated in the academic calendar approved at the Faculty Board.

#### ECOLOGICAL OBSERVATIONS.

In order to help achieve an immediate sustainable environment and fulfill the strategic objective 9 of the Green Campus FCS Plan, the documentary work carried out in this area:

La.- Majority will be requested in virtual format and computer support.

B.- On paper:

- No plastics will be used.
- Double-sided printing is performed.
- Recycled paper will be used.
- Drafts will be avoided.



## Sources of information

|                      |   |
|----------------------|---|
| <b>Basic</b>         | <p>Libro blanco de la accesibilidad. Rovira-Beleta y Cuyás, Enrique. Barcelona: UPC, [2003]. ISBN 8483017431. Lei 10/2014, do 3 de decembro, de accesibilidade. Diario Oficial de Galicia de 17 de decembro de 2014. Decreto 35/200, do 28 de xaneiro, polo que se aproba o Regulamento de desenvolvemento e execución da Lei de accesibilidade e eliminación de barreiras na Comunidade Autónoma de Galicia. Diario Oficial de Galicia de 29 de febreiro de 2000. Salud laboral: conceptos y técnicas para la prevención de riesgos laborales. Carlos Ruiz Frutos [et al.]. Barcelona: Elsevier, 2013. ISBN 9788445821466. Técnicas de prevención de riesgos laborales: seguridad e higiene del trabajo. Madrid: Tebar, 2012. ISBN 978847360479. Legislación sobre Seguridad y Salud en el Trabajo Disposiciones Generales. Osalan, 2001. Legislación sobre Seguridad y Salud en el Trabajo: disposiciones específicas. Osalan, 2001. Domótica e inmótica: viviendas y edificios inteligentes. Cristóbal Romero Morales, Madrid: Ra-Ma, 2010. ISBN 9788499640174. Método de adaptación ergonómica de puestos de trabajo para personas con discapacidad. Valencia: Instituto de Biomecánica de Valencia. 2003. Lantegi Batuk. ?Método de adecuación de perfiles de la tarea a la persona?. Vizcaya: Fundación Lantegi Batuk. 2014. (<a href="http://www.lantegi.com">http://www.lantegi.com</a>). Comité de expertos sobre Diseño Universal. Hacia la plena participación mediante el Diseño Universal. Madrid: Instituto de Mayores y Servicios Sociales; 2010. Serie Documentos Técnicos. (<a href="http://www.imserso.es">http://www.imserso.es</a>). ONCE. Accesibilidad para personas con ceguera y deficiencia visual. Madrid: ONCE; 2003. (<a href="http://www.once.es">http://www.once.es</a>).</p> |
| <b>Complementary</b> |   |

## Recommendations

### Subjects that it is recommended to have taken before

### Subjects that are recommended to be taken simultaneously

Work Placement II/653G01210

### Subjects that continue the syllabus

## Other comments

1.- To help to achieve some sustainable immediate surroundings and fulfil the strategic aim 9 of the " I Plan of Half Sustainability-environmental Green Campus FCS", the documentary works that realise&nbsp; in this matter:a.- Mostly they will request&nbsp; in virtual format and computer support.b.- To realise&nbsp; in paper:- No&nbsp; emplarán plastic.- They will realise&nbsp; impressions to double expensive.- It will employ&nbsp; paper recycled.- It will avoid&nbsp; the impression of drafts. 2.- The responsible professor reserves&nbsp; the possibility to realise some change in the evaluation or other appearances that will be notified to the students with sufficient antelación.

(\*)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.