



Teaching Guide						
Identifying Data				2016/17		
Subject (*)	Ergonomía, accesibilidad, diseño universal e adaptación funcional	Code	653G01206			
Study programme	Grao en Terapia Ocupacional					
Descriptors						
Cycle	Period	Year	Type	Credits		
Graduate	1st four-month period	Second	Obligatoria	5		
Language	SpanishGalicianEnglish					
Teaching method	Face-to-face					
Prerequisites						
Department	Ciencias da SaúdeMedicina					
Coordinador	Santos del Riego, Sergio Eduardo	E-mail	sergio.santos.delriego@udc.es			
Lecturers	Garcia Crespo, Maria Vanessa Santos del Riego, Sergio Eduardo	E-mail	m.v.garcia@udc.es sergio.santos.delriego@udc.es			
Web						
General description	<p>This subject pursues the acquisition and the development of competencies 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:</p> <p>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	
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 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 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 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 A12	B6	

Contents			
Topic	Sub-topic		
Subject 1.- Architectural barriers: Project without barriers I (Practice applied, first contact stop a new vision of the outline and of the world). Prof. Sergio Santos del Riego.	<p>Domicile. Buildings and public roads. Transport. Communication. Others.</p>		
Subject 2.- Models inclusivos for the personal autonomy, worthy and independent life. Physical barriers and socioculturales. Discrimination. Other barriers: Social Exclusion versus Social Marginalisation. Prof. Sergio Santos del Riego.	<p>Model Rehabilitador versus Social Model. The union does the strength. Physical barriers and partner-cultural. Sociology of the Inequality. Social marginalisation: historical Concepts, current and according to satisfaction of the needs. Social exclusion. Social exclusion versus social Marginalisation. Social and Cultural barriers. Communities of exclusion/social/disadvantaged marginalisation.</p>		
Subject 3.- Official basic concepts: Accessibility, Universal Design, Functional Adaptation and Ergonomics. Accessibility in Europe, in Spain and in Galicia: Generalities. Prof. Sergio Santos del Riego.	<p>Concepts: - Accessibility. - Universal design. - Functional adaptation. - Ergonomics. Accessibility in Europe. Accessibility in Spain. Accessibility in Galicia. Specific studies of accessibility (Teaching no face-to-face of students).</p>		
Subject 4.- The universal social participation in the Environmet. The Universal Design for the Accessibility. Prof. Sergio Santos del Riego.	<p>Environment: Overview and Concepts. - Accessibility / Environment. European concept. - Middle environmental sustainability. - Types of Environments. - Rating scales accessibility / environment: Housing Enabler. - Symbology accessibility Universal Design: basic principles (Ron Mace). - A Matter of Inclusion. - Visibility and Adaptability. - Health and security. - Universal Design Criteria.</p>		
Subject 5.- Sustainable Development Goals of the United Nations 2030. Think Global, Act Local. Prof. Sergio Santos del Riego.			



Subject 6.- Technical of Prevention of labour risks. Prof. Sergio Santos del Riego.	Prevention of labour risks (PRL): - basic Concepts on seguridady health. - Specialitys of PRL: Security in the work, industrial Hygiene and Ergonomics and Psicosociología applied. - Risks: conditions of security, environmental, ergonomic and psychosocial. - Technical specific of follow-up and control of the labour risks. - Promotion of the prevention. - Technical affine.
Subject 7.- Ergonomics. Prof. Sergio Santos del Riego.	Generalities and concepts. Types of Ergonomics. Ergonomics. Labour ergonomics. Ergonomics and Disability. Practice.
Subject 8.- Juridical and legal frame of the Accessibility and the Universal Design. Prof. Sergio Santos del Riego.	
Subject 9.- Robotic and Domótica. Project without barriers II. Prof. Sergio Santos del Riego.	Control of the surroundings: Generalities.
Subject 10.- Intervention on the surroundings from the Occupational Therapy Prof. Vanessa García Crespo.	Argumentation and theoretical motivation. Influence of the surroundings on the occupation. Performance on the surroundings according to the areas of occupation. Methodology of intervention of Occupational Therapy on the environment.
Subject 11.- Functional adaptation vs universal accessibility. Prof. Vanessa García Crespo.	Conceptual difference between functional adaptation, universal accessibility and universal design. Assessment of Occupational Therapy applied to both interventions. Advice of Occupational Therapy according to the different surroundings of execution.
Subject 12.- Ergonomic design of products. Prof. Vanessa García Crespo.	Aims of the ergonomic design. Recommendations based in data antropométricos. Recommendations based in individual characteristics of the subjects.
Subject 13.- Functional adaptation/Adjust reasonable in the domicile. Prof. Vanessa García Crespo.	Planning of the intervention: assessment and advice from the Occupational Therapy. Design of functional surroundings in the domicile. Realisation of technical reports. Reasoning applied to practical cases.
Subject 14.- Functional adaptation/Adjust reasonable in the half school and in the place of work. Prof. Vanessa García Crespo.	Planning of the intervention: assessment and advice from the Occupational Therapy. Design of functional surroundings in the work. Realisation of technical reports. Reasoning applied to practical cases.
Subject 15.- Methodologies of adjust subject-surroundings-occupation applied to the place of work. Prof. Vanessa García Crespo.	The methods of adjust like half for the labour and social integration. Analysis of different methods of adjust (method of profiles LB, ErgoDis IBV, EAM, MASTERS). Application of methods of adjust to practical cases.

Planning				
Methodologies / tests	Competencies	Ordinary class hours	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A2 A8 A19 B3 B31	15	30	45
Collaborative learning	A11 A12 B6 B8 B24 C1	30	43	73
Mixed objective/subjective test	A8 B3 B8 C1	2	0	2



Introductory activities	A19 B3 B31	2	0	2
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 work of group and public exhibition during the class.
Mixed objective/subjective test	It tests that it integrates questions type of proofs of essay and questions type of objective proofs. 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 C1	- Evaluation document of the student/student and of the student/professor that will realise both professors of the subject, will present to the beginning of the course. - The evaluation document of the student/student and of the student/professor will value supervised works (TT) individual presented by each student in big group (GG). The examination test will realise on the contents of the TT presented by each student in GG. Some significant appearances of the documents of evaluation of the student by the professor: 1.- Assistance to class: 1 point. Each professor will happen relation of signature for the students in the classes. 2.- In the respective evaluation of each professor two points will determine in a examination test that will realise in the respective TGR of the two last afternoons of class.	50



Mixed objective/subjective test	A8 B3 B8 C1	Examination:5 points (average of both professors on five points).	50
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Assessment comments

1.- GENERAL CRITERION OF EVALUATION: The final evaluation of the students will realise according to the following criterion: 50% will correspond to the continuous evaluation (5 points) and 50% to the evaluation of the final examination (5 points).2.- CONTINUOUS EVALUATION: The final note of continuous evaluation is the average of two averages, one of the Prof. Santos del Riego and another of the Prof. Vanessa García Crespo. In concrete, each professor will do the average of the evaluation documents (student/student and student/professor) evaluated on five points. The evaluation documents will present to the students in the initial activities of the asignatura.In the continuous evaluation, by independent, each professor will evaluate the assistance and, with the nuances that express in the first day of Initial Activities, part or the whole of the following criterion: the participation in activities and debates directed (skills of communication, reasoning in the speech), the resolution of the theoretical activities-practical proposals, the exhibition of individual and/or grupal works (organisation and structure, presentation, dinamización of the group) and the integration of the theoretical contents applied to the practical intervention.The continuous evaluations will realise with evaluation documents on 5 points, that obtain of the average of the following:- EVALUATION DOCUMENT OF THE STUDENT BY THE STUDENT: Evaluation of the student realised by mates of class.- EVALUATION DOCUMENT OF THE STUDENT BY THE PROFESSOR: Evaluation of the student realised by the professor. Among others, it includes a ítem of assistance on 1 point. Like part of this evaluation document each professor will realise a partial proof the last days of class to evaluate the knowledges purchased through the presentations of works and theoretical activities-practical realised in the class.

Sources of information

Basic	Libro blanco de la accesibilidad. Rovira-Beleta y Cuyás, Enrique. Barcelona: UPC, [2003]. ISBN 8483017431. Accesibilidad universal: requisitos de espacios públicos y urbanizados, entornos edificados, transporte y comunicación. Fundosa Accesibilidad, Madrid: AENOR, 2009. ISBN 9788481436631. Rafael Sánchez Montoya. ?Ordenador y discapacidad. Guía práctica de apoyo a las personas con necesidades educativas especiales?. Editorial CEPE. Madrid. 2002. (http://www.ordenadorydiscapacidad.net/). Concepto Europeo de Accesibilidad. Edita: Ministerio de Trabajo y Asuntos Sociales. Instituto de Migraciones y Servicios Sociales. Centro Estatal de Autonomía Personal y Ayudas Técnicas (CEAPAT). Madrid. Carlos Egea y Alicia Sarabia. ?Diseño Accesible de Páginas web. Pautas de accesibilidad al contenido en la Web 1.0?. Consejería de Trabajo y Asuntos Sociales. Dirección General de Política Social. Murcia. 2001. Decreto 35/2000, del 28 de enero. ?Reglamento de desarrollo de ejecución de la Ley de accesibilidad y eliminación de barreras en la Comunidad Autónoma de Galicia? Diario Oficial de Galicia de 29 de febrero de 2000. I Plan Nacional de Accesibilidad 2004-2012. Por un nuevo paradigma, el Diseño para Todos, hacia la plena igualdad de oportunidades. Ministerio de Trabajo y Asuntos Sociales. Madrid. 2003. Salud laboral: conceptos y técnicas para la prevención de riesgos laborales. Carlos Ruiz Frutos [et al.]. Barcelona: Elsevier, 2913. 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. Técnicas de prevención de riesgos laborales: Seguridad e higiene del trabajo. José María Cortés Díaz, 2002. Seguridad Industrial y salud. C. Ray Asfahl, 1999. Domótica y hogar digital. Stefan Junestrand. Madrid: Thomson, 2004. ISBN 8428328919. Domótica e inmóviles: viviendas y edificios inteligentes. Cristóbal Romero Morales, Madrid: Ra-Ma, 2010. ISBN 9788499640174. LantegiBatuak. ?Método de adecuación de perfiles de la tarea a la persona?. Vizcaya:Fundación Lantegi Batuak. 2014. (http://www.lantegi.com). 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. (http://www.imserso.es). ONCE. Accesibilidad para personas con ceguera y deficiencia visual. Madrid: ONCE;2003. (http://www.once.es).
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Complementary	?Libro Blanco: I+D+I al servicio de las personas con discapacidad y las personas mayores?. INSERSO, Dirección General de Política Tecnológica y Comité Español de Representantes de Minusválidos. Valencia. 2003.Guía FORTUNE: Forum for User-Organisations Training for Usability and Networking In Europe (Foro para la formación y participación de organizaciones de usuarios sobre temas de calidad de uso y comunicación en aplicaciones de I+D en Europa). CEPATA. Ministerio de Trabajo y Asuntos Sociales. Madrid. 200Sistemas de control del entorno por ordenador. Ministerio de Trabajo y Asuntos Sociales. Madrid. 1988.Turner A, Foster M, Johnson SE. ?Terapia ocupacional y disfunción física: principios, técnicas y práctica? 5ª edición. Elsevier Science. Madrid. 2003.Begoña Polonio, Pilar Durante y Blanca Noya. ?Conceptos fundamentales de Terapia Ocupacional?. Editorial Médica Panamericana. Madrid. 2001.Portell E. ?Ayudas técnicas en la discapacidad física? Editorial: GUTTMANN. 1996.?Empleo, discapacidad e innovación tecnológicas?. FUNDESCO y Real Patronato de Prevención y de Atención a Personas con Minusvalía. 1989.MC. Asensi Borrás. ?Programas informáticos para el entrenamiento de la comprensión lectora?. Cuadernos de Audición y Lenguaje, 2. Formato CD-ROM. Ed: Asociación de Profesores de Audición y Lenguaje de la Comunidad Valenciana. Valencia. 2001.Guía para la eliminación de las barreras de comunicación. Federación de Asociaciones de Xordos do País Galego. A Coruña. 1999.Ferrer Manchón ?Ayudas técnicas y tecnológicas para la vida cotidiana?. En Rasgos Sociológicos y Culturales de las Personas Sordas. Una aproximación a la situación del colectivo de personas sordas en la Comunidad Valenciana. Fundación FESORD-CV. Valencia. 2000M. García Viso, R. Puig De La Bellacasa. ?Empleo, discapacidad e innovación tecnológica?. Fundesco. Madrid. 1988.F. González Franco. ?Aplicaciones de las telecomunicaciones a las personas con discapacidad. Alternativas para las personas deficientes auditivas?. Revista de la Federación Española de Asociaciones de Padres y Amigos de los Sordos. nº 45. Madrid. 1995.Nuevas tecnologías aplicadas a la discapacidad. Ministerio de Trabajo y Asuntos Sociales. Madrid. 1995.
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Recommendations

Subjects that it is recommended to have taken before

Subjects that are recommended to be taken simultaneously

Estancias Prácticas 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 in this matter:a.- Mostly they will request in virtual format and computer support.b.- To realise in paper:- No emplarán plastic.- They will realise impressions to double expensive.- It will employ paper recycled.- It will avoid the impression of drafts. 2.- The responsible professor reserves 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.