



Teaching Guide

Identifying Data					2015/16
Subject (*)	Paisaxe e Hábitat sostible		Code	630G02056	
Study programme	Grao en Estudos de Arquitectura				
Descriptors					
Cycle	Period	Year	Type	Credits	
Graduate	2nd four-month period	Fifth	Optativa	6	
Language	SpanishGalician				
Teaching method	Face-to-face				
Prerequisites					
Department	Proxectos Arquitectónicos e Urbanismo				
Coordinador	Rodríguez Alvarez, Jorge	E-mail	jorge.ralvarez@udc.es		
Lecturers	Rodríguez Alvarez, Jorge Rodríguez Blanco, Emilio	E-mail	jorge.ralvarez@udc.es emilio.rblanco@udc.es		
Web	http://paisaxeetsac.blogspot.com.es/ https://www.facebook.com/pages/Paisaxe-e-Habitat				
General description	<p>Paisaxe non é igual a natureza. O concepto de paisaxe implica a elaboración dun esquema mental fortemente influenciado pola suma aditiva de experiencias culturais. A natureza é unha entidade en si mesma, mentres que a paisaxe precisa ser interpretada ou experimentada. A través do coñecemento das relacións que se establecen entre o paisaxe e a experiencia, así como do axentes causantes de esas relacións será posible abordar unha interpretación dos paisaxes existentes e a súa reformulación creativa. A materia trata de introducir ao alumno no entendemento dos elementos que compoñen a paisaxe e as relacións que establecen entre eles. O obxectivo é dotar ao alumno das ferramentas necesarias para poder integrar estudos, e criterios paisaxísticos nos seus proxectos de arquitectura e urbanismo. O foco da materia está na paisaxe resultante das intervencións do ser humano dentro do seu hábitat. Hábitat entendido como o medio ambiente no que o humano se desenvolve, vive, traballa e do que extrae recursos. Unha parte fundamental da materia tratará as relacións entre a paisaxe e a preservación dese hábitat; o hábitat sostible.</p>				

Study programme competences / results

Code	Study programme competences / results
A2	Ability to conceive and represent the visual attributes of objects and master proportion and drawing techniques, including digital ones (T)
A3	Knowledge of spatial representation systems and projections adapted and applied to architecture
A4	Knowledge of the analysis and the theory of form and the laws of visual perception adapted and applied to architecture and urbanism
A17	Ability to apply technical and construction standards and regulations
A19	Ability to maintain the finished work
A20	Ability to assess the construction works
A34	Ability to design, implement and develop sketches and drafts, concept designs, developed designs and technical designs (T)
A35	Ability to design, implement and develop urban projects (T)
A36	Ability to design, implement and develop construction management (T)
A40	Ability to practise architectural criticism
A41	Ability to solve the passive environmental conditioning, including thermal and acoustic insulation, climate control, energy efficiency and natural lighting (T)
A44	Ability to develop civil work projects (T)
A45	Ability to design and execute urban layouts and urbanization, gardening and landscape design projects (T)
A46	Ability to apply standards and urban regulations
A47	Ability to develop environmental, landscape and environmental impact correction studies (T)
A51	Adequate knowledge of the methods of studying the social requirements, living conditions, habitability and basic housing programmes
A52	"Adequate knowledge of ecology, sustainability and the principles of conservation of energy and environmental resources. "
A53	Adequate knowledge of the architectural, urban and landscape traditions of Western culture, as well as their technical, climatic, economic, social and ideological foundations.
A55	Adequate knowledge of the relationship between cultural patterns and social responsibilities of the architect



A58	Adequate knowledge of the methodological foundations of territorial, metropolitan and urban planning.
A67	Coñecemento avanzado de aspectos específicos da materia de Proxectos no contemplados expresamente na Orde EDU/2075/2010
A69	Coñecemento avanzado de aspectos específicos da materia de Urbanismo no contemplados expresamente na Orde EDU/2075/2010
B1	Students have demonstrated knowledge and understanding in a field of study that is based on the general secondary education, and is usually at a level which, although it is supported by advanced textbooks, includes some aspects that imply knowledge of the forefront of their field of study
B2	Students can apply their knowledge to their work or vocation in a professional way and have competences that can be displayed by means of elaborating and sustaining arguments and solving problems in their field of study
B3	Students have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues
B4	Students can communicate information, ideas, problems and solutions to both specialist and non-specialist public
B5	Students have developed those learning skills necessary to undertake further studies with a high level of autonomy
B7	Knowing the role of the fine arts as a factor that influences the quality of architectural design
B8	Knowing the urbanism and techniques applied in the planning process
C1	Expressing themselves correctly, both orally and in writing, in the official languages of the autonomous region
C3	Using basic tools of information technology and communications (ICT) necessary for the exercise of the profession and for lifelong learning
C4	Exercising an open, educated, critical, committed, democratic and caring citizenship, being able to analyse facts, diagnose problems, formulate and implement solutions based on knowledge and solutions for the common good
C5	Understanding the importance of entrepreneurship and knowing the means available to the entrepreneur
C6	Critically evaluate the knowledge, technology and information available to solve the problems they must face
C7	Assuming as professionals and citizens the importance of learning throughout life
C8	Assessing the importance of research, innovation and technological development in the socio-economic advance of society and culture

Learning outcomes			
Learning outcomes	Study programme competences / results		
Análise e estudo do medio físico e os valores ambientais	A34	B1	C1
	A35	B2	C3
	A41	B3	C4
	A45	B4	C5
	A47	B5	C6
	A51		C7
	A52		C8
	A55		
	A58		
	A67		
	A69		
Representación da paisaxe, elementos e composición aplicados á planificación territorial	A2	B7	C6
	A3	B8	
	A4		
Coñecemento dos principios da ecoloxía urbana	A44		
	A45		
	A46		
	A47		



Integración efectiva de criterios ambientais e estéticos no deseño de espacios abertos, rúas, prazas, parques ou xardíns	A17 A19 A20 A36 A40 A53		
Desenrolo da capacidade de observación crítica e construtiva en relación ao medioa ambiente urbano	A40	B4 B5	C1 C5 C6

Contents	
Topic	Sub-topic
PRINCIPIOS BÁSICOS E INTRODUCCIÓN	Introdución: Os valores ambientais O debuxo coma ferramenta Ferramentas de análise
TEORÍAS E MÉTODOS NA PAISAXE NA ESCALA TERRITORIAL	Análise e valoración ambiental Ecoloxía da paisaxe Cidades sostenibles
O PROXECTO DE PAISAXE	As paisaxes do home: do xardín do paraíso ao xardín ecolóxico A paisaxe coma sustrato da acción artística O proxecto do espazo público
A PAISAXE DA METRÓPOLIS	A mobilidade urbana Forma urbana e enerxía

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Guest lecture / keynote speech	A51 A52 A53 A55 A58 A67 A69 B8	13	26	39
Workshop	A47 A46 A45 A44 A41 A36 A35 A34 A20 A19 A17 B3 B4 B5 C1 C4 C6	30	60	90
Document analysis	A40 B1 B2 C7 C8	2	4	6
Mixed objective/subjective test	A40 A45 A46 A47 A51 A52 A53 A55 A58 A67 A69 B2 B3 B7 B8 C1	4	8	12
Introductory activities	A2 A3 A4 B7 C3 C5	2	1	3
Personalized attention		0		0

(*)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	Cada semana introducirase un tema relacionado cos contidos da materia mediante presentación dos docentes. O alumno terá que complementar esa presentación coa lectura de extractos de bibliografía recomendada.
Workshop	Dúas horas á semana adicaránse ao traballo práctico na aula que consistirá nun proxecto de análise en intervención nun ámbito con interese ambiental. Realizarase en grupo.
Document analysis	Unha parte importante do traballo na paisaxe consiste en seleccionar a recopilar a información e os datos relevantes. Por elo o alumno deberá familiarizarse cos instrumentos máis utilizados na disciplina.



Mixed objective/subjective test	Composta por: Proba de resposta múltiple : Preguntas realiccionadas cos contidos vistos en clase e múltiples opcións de resposta onde só unha é correcta Proba de carácter práctico: basada nun posible caso real de intervención sobre a paisaxe. Realizarase de forma individual na aula designada
Introductory activities	A primeiras dúas semanas de clase consistirá na exposición dos contidos e o desenvolvemento da materia e o arranque dos traballos, coa visita ao ámbito e a primeira aproximación as fontes documentáis

Personalized attention

Methodologies	Description
Workshop Introductory activities Document analysis	Os traballos da materia realizaranse segundo as orientacións do profesor. Os obradoiros desenvolveranse na aula onde o profesor estará dispoñible para responder as dúbidas que xurdan. O seguimento das actividades iniciáis realizarase nas sesións de corrección ou nas horas de tutorías. As cuestións ou dúbidas comúns poderán resolverse a través do moodle ou tutorías

Assessment

Methodologies	Competencies / Results	Description	Qualification
Workshop	A47 A46 A45 A44 A41 A36 A35 A34 A20 A19 A17 B3 B4 B5 C1 C4 C6	Valorarase o coñecemento e comprensión dos principios introducidos no curso. Demostración de pensamento innovador e creativo. Coherencia cos enunciados do exercicio. Clara presentación dos resultados. Capacidade gráfica de ilustrar os resultados de xeito visual e capacidade de comunicación verbal e non verbal	40
Mixed objective/subjective test	A40 A45 A46 A47 A51 A52 A53 A55 A58 A67 A69 B2 B3 B7 B8 C1	Uso responsable das ferramentas e coñecementos impartidos no curso. Pensamento innovador creativo. Observación e capacidade crítica. Presentación gráfica.	40
Introductory activities	A2 A3 A4 B7 C3 C5	Habilidade para seleccionar e organizar a información. Capacidade para analizar o lugar segundo as variables ambientáis máis relevantes	5
Guest lecture / keynote speech	A51 A52 A53 A55 A58 A67 A69 B8	Valorarase a asistencia e a participación activa así coma a lectura da bibliografía proposta en cada tema	10
Document analysis	A40 B1 B2 C7 C8	Habilidade para seleccionar e organizar a información. Deseño gráfico e ilustración dos resultados da análise	5

Assessment comments



O modo máis doado e desexable de superar a materia é por curso.

Para elo e necesario asistir as clases e obradoiros (80% asistencia mínima) e acadar a calidade mínima nos traballos segundo os criterios de avaliación enumerados anteriormente.

A proba mixta valorará o aproveitamento das clases maxistrais, polo que é recomendable non so asistir senón a participación activa

O traballo de curso será desenvolvido dentro do obradoiro e no traballo fora da aula, as correccións faranse nos obradoiros.

Para

optar ao aprobado na segunda oportunidade haberá que entregar o 100% das prácticas realizadas no curso e alcanzar un nivel de aprobado nas mesmas. O exame da segunda oportunidade abarcará os temas introducidos no curso, pero en maior profundidade, considerando a bibliografía referida como fonte de información necesaria para superar a proba.

Sources of information



Basic	<p>Apuntes específicos Rodríguez Álvarez, J. (2015) Apuntes de paisaje: el análisis ambiental. Repronor [disponibles en reprografía]</p> <p>Bibliografía específica Rodríguez Álvarez, J. (2014) Planning Cities for the Post-Carbon Age. A Metabolic Analysis of the Urban Form . Tesis Doctoral UDC [descargable en http://ruc.udc.es/handle/2183/11927]</p> <p>Rodríguez Álvarez, J. (2013) La Tercera Revolución Ambiental. Capítulo en: Fernández Prado, M. Rodríguez Álvarez, J. (eds.) Miscelánea Urbanística: Experiencias, retos e instrumentos. Departamento de Proyectos Arquitectónicos y Urbanismo. Universidade da Coruña</p> <p>Rodríguez Álvarez, J. (2013) Visualizando el Metabolismo de las Ciudades Proc. 4th European Conference on Energy Efficiency and Sustainability in Architecture and Planning. Donostia-San Sebastian</p> <p>Rodríguez, J. (2010). Rehabilitación energética del tejido urbano residencial. evaluación previa para una mayor eficiencia. SB10mad?Edificación sostenible. Revitalización y rehabilitación sostenible de barrios. Cabrita, A.L. & Rodríguez Álvarez, J. (2010) Breeam Communities in Spain . Sustainable Cities Conference Proceedings. Wessex Institute of Technology published by WIT Press</p> <p>Rodríguez Álvarez, J. (2010) La certificación de la sostenibilidad de la urbanización Proceeding of Congreso Nacional de Medio Ambiente (CONAMA) Madrid 2010</p> <p>Battle, E. (2011) El jardín de la metrópoli. Gustavo Gili. Barcelona</p> <p>Brown, G.Z. (1985) Sun, Wind, and Light .Architectural Design Strategies. Wiley</p> <p>[B] Claver Farias, I. (1984) Guía Para la Elaboración de Estudios del Medio Físico . CEOTMA</p> <p>[B] Corner, J. (1992) Representation and Landscape .Capítulo en Swaffield, S. (2002 ed.) Theory in Landscape Architecture. University of Pennsylvania Press</p> <p>Energy Research Group et al (Eds. 1999) A Green Vitruvius. Principles and Practice of Sustainable Architectural Design. James & James Ltd. London. [B] Galí-Izard, T. (2005) Los mismos paisajes ideas e interpretaciones . Gustavo Gili</p> <p>[B] García-Germán, J. ed. (2010) De lo mecánico a lo termodinámico : por una definición energética de la arquitectura y del territorio. Gustavo Gili</p> <p>Gehl, J. & Svarre, B. (2013) How to Study Public Life. Island Press</p> <p>Girardet, H. (1992) The Gaia Atlas of Cities :new directions for sustainable urban living. Gaia Books. Herzog, T. (ed. 1996). Solar Energy in Architecture and Planning . Prestel, Berlin. [B] Jellicoe G. y S. (1995) El Paisaje del Hombre Barcelona G.G. [B] Knowles, R.L. (1974) Energy and Form . An Ecological Approach to Urban Growth. MIT Press</p> <p>Littlefair, P. et al (2000). Environmental site Layout Planning: solar access, Microclimate and passive cooling in urban areas. Building Research Establishment, BR 380. López de Asiaín, J. (1997) Espacios abiertos en la expo 92 . Sevilla ETSA</p> <p>[B] McHarg, I. (1972) Design with Nature New York Doubleday & Company 1972</p> <p>[B] Navés Viñas, F. (1992) El Arbol en la Jardinería y el Paisajismo Barcelona Omega 1992</p> <p>[B] Oke, T.R. (1987). Boundary Layer Climates .Chapters 7 & 8 only. Methuen & Co., London</p> <p>Roaf, S. et al (2005). Adapting Buildings and Cities for Climate Change . Architectural Press. Rogers, R. (1997). Cities for a Small Planet .Faber & Faber, London</p> <p>Salvador Palomo, P.J. (2003) La Planificación Verde en las Ciudades . Gustavo Gili</p> <p>[B] Shannon, K. Smets, M. (2010) The Landscape of Contemporary Infrastructure . Nai Publishers</p> <p>Smith, P.F. (2006). Architecture in a Climate of Change . Architectural Press. Steenbergen, C. (2008) Composing Landscapes .Analysis, Typology and Experiments for design. Birkhäuser</p> <p>Szokolay, S. (2003). Introduction to Architectural Science. The basis of sustainable design. Architectural Press. Thomas, R. (Ed. 2003). Sustainable Urban Design. An environmental approach. Spon Press</p> <p>[B] Disponible en la biblioteca de la UDC</p>
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Complementary

[B] Disponible en la biblioteca de la UDC· Ábalos, I. (2008) Atlas pintoresco .Vol. 1: el observatorio. Gustavo Gili [B]· Ábalos, I. (2008) Atlas pintoresco .Vol. 2: los viajes. Gustavo Gili [B]· Ábalos, I. (2009) Naturaleza y artefacto : el ideal pintoresco en la arquitectura y paisajismo contemporáneos. Gustavo Gili [B]· Álvarez, D. (2007) El Jardín en la arquitectura del siglo XX . Editorial Reverté [B]· As Paisaxes do Home- Bell, P.A. Greene, T.C. Fisher, J.D. Baum, A. (2001) Environmental Psychology. Harcourt [B]· Bell, S. (1999) Landscape : Pattern, Perception and Process. London E.& Spon [B]· Bruse, M. (v.2009) Envi-met 3.1 Manual· Celik, Z. Favro, D. Ingersoll, R. (1994) Streets. Critical perspectives on Public Space . University of California Press [B]· Constant, C. (1994) The woodland cemetery toward a spiritual landscape, Erik Gunnar Asplund and Sigurd Lewerentz, 1915-1961. Byggförlaget [B]· Corner, J. ed. (1999) Recovering Landscape . Essays in Contemporary Landscape Architecture. Princeton University Press [B]· Forman, R.T.T. (1999) Land mosaics . The ecology of landscapes and regions. Cambridge University Press [B]· Givoni, B. (1998). Climate Considerations in Building and Urban Design . Van Nostrand Reinhold. [B]· Givoni, B. (1998). Climate Considerations in Building and Urban Design . Van Nostrand Reinhold. [B]· Habitar a paisaxe- Kirschenmann, J.C. (1984) Vivienda y Espacio Público. Rehabilitación Urbana y Crecimiento de la Ciudad. Gustavo Gili [B]· Krier, R. (2003) Town Spaces. Contemporary Interpretations in Traditional Urbanisms. Birkhäuser· Laurie, M. (1995) Introducción a la Arquitectura del Paisaje Barcelona G.G. [B]· López de Asiain, J. (2001) Arquitectura, ciudad, medio ambiente . Sevilla: Universidad de Sevilla [B]· Lynch, K. (1966) La Imagen de la Ciudad Ed. Infinito 1966 [B]· Lynch, K. (1980) La Planificación del Sitio Barcelona G.G. 1980 [B]· Marshall, S. (2005) Street Patterns . Spon Press [B]· McGrath, B. (2008) Digital Modelling for Urban Design . Wiley [B]· Mertens, E. (2010) Visualizing Landscape Architecture . Birkhäuser [B]· Montero, M. I. (2001) Burle Marx el paisaje lírico . GG [B]· Moughtin, C. (1992) Urban Design. Street and Square. Butterworth Architecture [B]· Nielsen, B. Dam, T. Thompson, L. (2007) European Landscape architecture:best practice in detailing. Routledge [B]· Pozueta Echavarrri, J. dir. (2009) La Ciudad Paseable. CEDEX [B]· Prinz, D. (1983) Planificación y configuración Urbana Barcelona G.G. 1983 [B]· Reid, G.W. (2002) Landscape Graphics . Plan, section and Perspective Drawing of Landscape Spaces. Watson Guptill. New York [B]· Simonds, J. O. (1978) Earthscape . A Manual of Environmental Planning. McGrawHill [B]· Simonds, J.O. (1961) Landscape Architecture New York McGraw Hill 1961 [B]· Steenbergen, C. (2008) Composing Landscapes . Analysis, Typology and Experiments for design. Birkhäuser· Steenbergen, C. Reh, W. (2001) Arquitectura y Paisaje . La proyección de los grandes jardines europeos. Gustavo Gili [B]· Szokolay, S. (1996). Solar Geometry. PLEA Note 1. PLEA International / University of Queensland· Tillman Lyle, J. (1985) Design for Human Ecosystems . Landscape, Land Use and Natural Resources. Van Nostrand Reinhold Co· Vaccarino, R. (2000) Roberto Burle Marx. Landscapes Reflected . Princeton Architectural Press [B]· Viljoen, A. ed. (2005) CPLUS Continuous Productive Urban Landscapes . Designing Urban Agriculture for Sustainable Cities. Architectural Press· Waterman, T. (2009) Principios Básicos de la Arquitectura del Paisaje . Capítulo 4. Representaciones. Nerea Académica [B]· Waterman, T. (2009) Principios Básicos de la Arquitectura del Paisaje . Nerea Académica [B]· Weilacher, U. (2008) Syntax of landscape . The landscape architecture of Peter Latz and Partners. Birkhäuser [B]· Bibliografía complementaria· Álvarez, S. (1991) Architecture and Urban Space Proceedings of the Ninth International PLEA Conference, Seville Spain September 24-27, 1991. Kluwer Academic Publishers [B]· Anderson, S. (1978) On Streets . MIT Press· Chatzidimitriou, A. and S. Yannas (2004). Microclimatic Studies of Urban Open Spaces in Northern Greece . Proc. PLEA 2004, Eindhoven, Vol. 1 pp83-88· Dorothée, I. (1993) The modernist garden in France . Yale University (2008) Cusveller, S. Dijk, O. Schipper, K. ed. (2000) Remaking NL City, Landscape, Infrastructure. Amsterdam : S@M [B]· Jacobs, A.B. (1993) Great Streets . MIT Press [B]· Jenks, M. and N. Dempsey (2005). Future Forms and Design for Sustainable Cities . Architectural Press· Knaack, U. Klein, T. Bilow, M. (2008) Imagine deflatableables . Delft University of Technology [B]· Levy, Leah (1998) Kathryn Gustafson. Sculpting the land . Spacemakers Press [B]· Lim, C.J. Liu, E. (2010) Smartcities+Eco-warriors . Routledge· Magalef, R. (1998) Ecología . Ediciones Omega [B]· Marshall, S. (2005) Street Patterns . Spon Press [B]· Molinari, L. ed. (2000) West 8 . Skira [B]· Reas, C. Fry, B. (2007) Processing : a programming handbook for visual designers and artists. MIT Press [B]· Spuybroek, L. (2009 ed.) Research&Design: the architecture of variation . Thames & Hudson [B]· Staub, U. Geiser, R. (2008) Explorations in architecture : teaching, design research. Birkhäuser [B]· Swaffield, S. (2002 ed.) Theory in Landscape Architecture . University of Pennsylvania Press· Terzidis, K. (2006) Algorithmic Architecture . Elsevier [B]· Yannas, S. (2000) Toward More Sustainable Cities. Solar Energy Journal Vol. 70 No. 3 pp281-294, Elsevier Science Limited· Yannas, S. (2000). Solar Control. En Designing for Summer Comfort . EC Altener Programme. Environment &



Recommendations

Subjects that it is recommended to have taken before

Urbanística 1/630G02018
Urbanística 4/630G02032
Proxectos 4/630G02016
Proxectos 2/630G02006
Proxectos 3/630G02011
Proxectos 1/630G02001
Urbanística 3/630G02029
Urbanística 2/630G02024

Subjects that are recommended to be taken simultaneously

Subjects that continue the syllabus

Other comments

(*)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.