



Teaching Guide

Identifying Data					2023/24
Subject (*)	Urbanism 5		Code	630G02042	
Study programme	Grao en Estudos de Arquitectura				
Descriptors					
Cycle	Period	Year	Type	Credits	
Graduate	1st four-month period	Fifth	Obligatory	6	
Language	SpanishGalicianEnglish				
Teaching method	Face-to-face				
Prerequisites					
Department	Proxectos Arquitectónicos, Urbanismo e Composición				
Coordinador	Rodriguez Alvarez, Jorge	E-mail	jorge.ralvarez@udc.es		
Lecturers	Diaz Revilla, Alfonso Llamazares Castro, Jesus Rodriguez Alvarez, Jorge Seoane Prado, Enrique	E-mail	a.diaz.revilla@udc.es j.llamazares@udc.es jorge.ralvarez@udc.es enrique.seoane@udc.es		
Web					
General description	<p>Urbanism 5 is focused on the development of urban planning and design competences. For this reason, it follows an eminently practical orientation, addressing some of the most relevant issues in contemporary urban practice, not least aspects of sustainability, equality, management, economics as well as the legal framework and planning processes. Learning is structured around a series of practical exercises and course projects, in which the concepts and tools introduced in the lecture sessions are applied. The course project will address an unfinished area of the city, typically equivalent to a Not Consolidated Urban Land (in the planning jargon), in which an urban regeneration operation adapted to current and future conditions is relevant. The urban figure of reference will be the Special Interior Reform Plan (PERI), which should aim to provide this area with the necessary infrastructure, integration of uses and building types, based on the formalization of the public and private collective space, on the improvement of urbanization, and in the adequate response to existing conditions, through regenerative responses in its environmental and building aspects. The subject will also support the Workshop of the ninth semester, following the calendar, guidelines and exercises agreed with the subject Architectural Projects 8, which coordinates such Workshop.</p>				

Study programme competences / results

Code	Study programme competences / results
A1	"Ability to apply graphical procedures to the representation of spaces and objects (T) "
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
A6	"Knowledge of graphic surveying techniques at all stages, from the drawing sketches to scientific restitution, adapted and applied to architecture and urbanism "
A10	"Knowledge of basic topography, hypsometry, mapping and earthmoving techniques adapted and applied to architecture and urbanism "
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)
A37	Ability to develop functional programs for buildings and urban spaces (T)
A39	Ability to remove architectural barriers (T)
A41	Ability to solve the passive environmental conditioning, including thermal and acoustic insulation, climate control, energy efficiency and natural lighting (T)
A42	Ability to catalogue the built and urban heritage and plan its protection (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)
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.
A59	Knowledge of the mechanisms of development and management of urban planning at all scales
A60	Knowledge of the legal framework in terms of civil laws, administration, planning, construction and building industry according to the professional practice
A61	Knowledge of feasibility analysis and the surveillance and coordination of integrated projects
A62	Knowledge of real estate valuation
A63	Development, presentation and public review before a university jury of an original academic work individually elaborated and linked to any of the subjects previously studied
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
B8	Knowing the urbanism and techniques applied in the planning process
B11	"Knowing the industries, organizations, regulations and procedures involved in translating design concepts into buildings and integrating plans into planning "
B12	Understanding the relationship between people and buildings and between these and their environment, and the need to relate buildings and the spaces between them according to the needs and human scale
C1	Adequate oral and written expression in the official languages.
C3	Using ICT in working contexts and 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 entrepreneurial culture and the useful means for enterprising people.
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	Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.

Learning outcomes

Learning outcomes	Study programme competences / results



<p>Acquire knowledge to project, plan, coordinate and direct the design and execution of urban infrastructures, incorporating criteria of sustainability, minimum environmental impact, economy and resilience.</p>	<p>A34 A35 A36 A37 A39 A41 A42 A44 A45 A46 A47 A52 A53 A55 A58 A59 A60 A61 A62 A63</p>	<p>B4 B5 B8 B11 B12</p>	<p>C1 C3 C4 C5 C6 C7 C8</p>
<p>Acquire knowledge to project, plan, coordinate and direct the design and execution of public or private outdoor spaces, with sustainability, comfort and landscape integration criteria.</p>	<p>A55 A58 A59 A60 A61 A62 A63</p>	<p>B11 B12</p>	<p>C6 C8</p>
<p>Learn to organize the process of construction, transformation, conservation and regeneration of human settlements; giving priority to the landscape, the treatment of form and space based on a design, perfecting the student's ability to intervene professionally in the different urban and / or rural areas, in relation to normative, constructive, environmental, social and of temporal and economic planning that an intervention of this type entails.</p>	<p>A34 A35 A36 A37 A39 A41 A42 A44 A45 A46 A47 A52 A53</p>	<p>B4 B5 B8</p>	<p>C1 C3 C4 C5 C7</p>
<p>Learn to prepare adequate cartographic documentation for the analysis and effective transmission of information and urban planning.</p>	<p>A1 A2 A3 A6 A10 A59</p>	<p>B4 B8</p>	<p>C3 C6 C8</p>

Contents	
Topic	Sub-topic



Section 1: Introduction	S1. Introduction: theory and practice in contemporary urbanism S2. GIS tools applied to urban planning S3. The basic tools of urban planning
Section 2: Areas of planning	S4. The existing city S5. From urban to rural S6. Planning and sustainability
Section 3: The infrastructural support of the city	S.7 Energy infrastructure S. 8 The water cycle S.9. Mobility and road infrastructure
Section 4: The urban project	S10. Reclaiming the street as a place S11. The public and collective space S12. Sustainability in the urbanization project

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Workshop	A34 A35 A36 A37 A39 A41 A42 A44 A45 A46 A47 A52 A53 A55 A58 A60 A61 A62 A63 B4 B5 B8 B11 C1 C3 C4	24	48	72
Collaborative learning	A1 A2 A3 A6 A10 A34 A35 A36 A37 A39 A41 A42 A44 A45 A46 A47 A52 A53 A55 A58 A59 A60 B5 B8 B11 B12 C1 C3 C4 C5 C7 C8	10	10	20
Guest lecture / keynote speech	A52 A53 A55 A58 A59 A61 B8 B11	10	10	20
Document analysis	C3 C4 C5 C8	1	1	2
Mixed objective/subjective test	A35 A52 A53 A55 A58 A59 A60 B8 C1	1	2	3
Seminar	A1 A2 A3 A6 A10 C6	10	10	20
Events academic / information	A1 A55 C4	2	4	6
Practical test:	A34 A35 A36 A37 A39 A41 A42 A45 A46 A47 A52 A53 A59	2	4	6
Personalized attention		1	0	1

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

Methodologies	
Methodologies	Description



Workshop	Organization of the class in small groups in which the students work together in the resolution of an urban planning in an area proposed by the tutors. The coursework will be developed in face-to-face sessions and each week the progress will be reviewed according to the marked schedule.
Collaborative learning	Exercises guided in person and / or supported with information and communication technologies, which are based on the organization of the class in small groups in which students work together to solve tasks assigned by teachers to optimize their own learning and that of other members of the group. Part of this work will be done in support of the program coordinated by Projects 8.
Guest lecture / keynote speech	Each week, a topic will be introduced by the lecturers. The student will have to supplement this presentation with the reading of recommended bibliography extracts. Attendance to lectures is mandatory, with a maximum of 20% of unexcused absences admitted. Sessions will be strictly timely. The use of mobile devices (such as computers, tablets or phones) will not be allowed during the course of the class
Document analysis	An important part of coursework consists in selecting the relevant information and data. Therefore, the student should be familiar with the instruments of the discipline. In addition, the existing cartographic bases in the different institutional repositories will be used.
Mixed objective/subjective test	Assessment exam for the level of knowledge of the contents of the subject. The test may include short answer questions, multiple choice questions, diagrams, drawings or sketches.
Seminar	Group work sessions focused on the introduction to Geographic Information Systems
Events academic / information	Preparation of material synthesis of the coursework for end of year exhibition organized by the Department of Architectural Projects, Urbanism and Composition: "Architectures in Process. DPAUC" (panels, models, drawings, videos, texts, representations, etc). Attendance at dissemination events (congresses, conferences, symposiums, seminars, etc.), organized by the ETSAC, the DPAUC, etc., indicated by the teaching staff of the subject as part of the teaching content of the subject, with the aim of providing students current knowledge and experience related to a particular field of study
Practical test:	Individual test that will consist of the resolution, at sketch-preliminary design level, of an intervention program on a given site.

Personalized attention

Methodologies	Description
Seminar Workshop Collaborative learning	The coursework will be carried out according to the guidelines of the tutors. Workshops will be held in the classroom where the tutor will be available to answer questions. The follow-up of the activities will be carried out in the individual or team corrections. Tutors will collect clues about the individual follow-up of the course, which will be part of the assessment. Common questions can be solved via Moodle

Assessment

Methodologies	Competencies / Results	Description	Qualification
Practical test:	A34 A35 A36 A37 A39 A41 A42 A45 A46 A47 A52 A53 A59	The capacity for effective interpretation and resolution of the proposed problem will be assessed, taking into account local, programmatic, environmental, topographic or regulatory restrictions.	10
Workshop	A34 A35 A36 A37 A39 A41 A42 A44 A45 A46 A47 A52 A53 A55 A58 A60 A61 A62 A63 B4 B5 B8 B11 C1 C3 C4	Active participation in the classroom, attendance, adequate progress in work and the fulfillment of the specific objectives proposed in the workshop statement will be evaluated. The works will include a part of the group and an individual development. Each of these parts will be assessed independently and both parties will have to approve.	40



Collaborative learning	A1 A2 A3 A6 A10 A34 A35 A36 A37 A39 A41 A42 A44 A45 A46 A47 A52 A53 A55 A58 A59 A60 B5 B8 B11 B12 C1 C3 C4 C5 C7 C8	Participation will be evaluated actively, critical attitude, architectural and urban culture and the ability to articulate and expose public-motivated opinions.	30
Mixed objective/subjective test	A35 A52 A53 A55 A58 A59 A60 B8 C1	The acquisition of the theoretical knowledge introduced in the course will be evaluated	10
Events academic / information	A1 A55 C4	Preparation of material summarize the coursework for the end of year exhibition organized by the Department of Architectural Projects, Urban Planning and Composition: "Architectures in Course. DPAUC" (panels, models, drawings, videos, texts, performances , etc.).	10

Assessment comments



Regarding the general evaluation of the course, the following aspects will be assessed: attendance and participation in class and workshops, evaluation of group work, evaluation of individual work, final test (mixed and practical).

To pass the course it is necessary to pass each of these items:

-Class attendance: minimum 80% of lecture sessions and 80% of interactive sessions. In addition, the teaching staff will assess whether the assistance is active through participation in the lecture sessions (answering questions posed), in team corrections, or individually. Active participation may be valued as an increase in the final grade.

-Workshop (U5): minimum 5

-Collaborative learning (Workshop): minimum 5

-Mixed test: minimum 5

-Practical exam: minimum 5

In the case of Fail in one of the items at the first opportunity, this item must be repeated and submitted at the second opportunity. Therefore, a list with the parts to be repeated will be provided. The grade of the first opportunity will be "Fail" if any of the items has been submitted, but not passed or "Not Submitted" (No Presentado) if any of the assessable items has been submitted.

For students with recognition of part-time dedication according to the "Norm that regulates the regime of dedication to study of undergraduate students at the UDC" the minimum class attendance will be 60%, both in the interactive sessions and in the expository sessions. The rest of the evaluation items will be the same as in the general case. In relation to the final test, the provisions in article 12 of the "Norms for Evaluation, Review and Claim of Qualifications for University Master's and Bachelor's Studies at the UDC" (consolidated version 2017) will apply.

Academic waiver: it is not contemplated, as it is a subject in which the workshop is the fundamental methodology.

The detection of plagiarism, as well as the fraudulent performance of tests or evaluation activities, once verified, will directly imply the grade of failing "0" in the subject in the corresponding call, thus invalidating any grade obtained in all evaluation activities. ahead of the extraordinary call.

Second opportunity:

To pass the course at the second opportunity, it is necessary to repeat the assessable items in which a Pass has not been achieved.

The course work (Planning and Collaborative Learning Workshop-Urbanization) will be re-elaborated, amended or completed according to the indications of the tutors of the course. For this, it is recommended that students make use of academic tutorials with their corresponding tutors during the second semester. The coursework will be submitted, at most, up to one week before the second opportunity exam.

Students who have pending work not delivered will not be able to take the exam.

To pass the subject on the second chance, it is necessary to achieve a 5 each of the assessable elements:

- Workshop (U5): minimum 5

-Collaborative learning (Workshop): minimum 5

-Mixed test: minimum 5

-Practical exam: minimum 5

Students who have not met the minimum class attendance during the term will not be eligible for a positive evaluation.

If one or more of these elements does not achieve the Pass evaluation threshold, the final mark will be Fail. However, active participation in class, during the term, demonstrating an adequate knowledge of the contents of the subject may be valued by the teaching staff in borderline situations regarding the practical test or the mixed test.



Basic

Textos seleccionados - lectura básica

Tema 1. Introducción: teoría y práctica en el urbanismo contemporáneo-Esteban Noguera, J. (2018) Urbanismo. Una inmersión rápida. Tibidabo Ediciones. Capítulo ¿La dimensión del urbanismo y la sustancia del urbanismo? pp: 104-122-Montaner, J.M. & Muxí, Z. (2020) Política y Arquitectura. Por un Urbanismo de lo Común y Ecofeminista. Gustavo Gili. Capítulo ¿Derecho la ciudad, derecho al barrio (contra la gentrificación)? pp: 164-176

Tema 2. Herramientas SIG aplicadas al urbanismo Lecturas -Olaya, V. (2020) Sistemas de Información Geográfica. Los Fundamentos pp: 1-48 (<https://volaya.github.io/libro-sig/>)-Referencia: QGIS. Manual del Usuario de Escritorio: <https://www.qgis.org/en/docs/index.html>

Tema 3. El instrumental básico de la ordenación urbanística Lecturas La lectura de una selección de textos extraídos de los siguientes libros complementará y consolidará los conceptos propuestos en la sesión expositiva. - Cebrián Tello, J.L. (2009) Ideología urbanística y legislación: la configuración del marco legal actual. En Dalda, J.L. Teoría y Método del Planeamiento General y Urbano. Universidade da Coruña pp: 141-150- Esteban Noguera, J. (2011) El instrumental básico de la ordenación urbanística. En Esteban Noguera, J. La ordenación urbanística: conceptos, herramientas y prácticas. Electa pp: 55-88-Dalda, J.L. (2009) La naturaleza de la planificación urbana. En Dalda, J.L. Teoría y Método del Planeamiento General y Urbano. Universidade da Coruña. pp: 33-44

Tema 4. La ciudad existente Lecturas La lectura de una selección de textos extraídos de los siguientes libros complementará y consolidará los conceptos propuestos en la sesión expositiva. Dalda, J.L. (2009) La recuperación urbanística de la ciudad histórica de Santiago de Compostela. En AAVV, Juan Luis Dalda Escudero. Urbanista. Universidade da Coruña. pp: 157-166 Esteban Noguera, J. (2011) La ciudad existente: el suelo urbano. En Esteban Noguera, J. La ordenación urbanística: conceptos, herramientas y prácticas. Electa pp: 89-114 Montaner, J.M. & Muxí, Z. (2020) Derecho a la ciudad, derecho al barrio (contra la gentrificación). En Montaner, J.M. & Muxí, Z. Política y Arquitectura. Por un urbanismo de lo común y ecofeminista. Gustavo Gili. Pp: 164-175 Sainz Gutiérrez, V. (2006) La intervención en la ciudad consolidada: los centros históricos. En Sainz Gutiérrez, V. El proyecto urbano en España. Génesis y desarrollo de un urbanismo de los arquitectos. Universidad de Sevilla. Consejería de Obras Públicas y Transportes. pp: 153-165

Tema 5. De lo urbano a lo rural Lecturas La lectura de una selección de textos extraídos de los siguientes libros complementará y consolidará los conceptos propuestos en la sesión expositiva. Dioni López, J. (2021) Cinco hipótesis sobre la dispersión. En Dioni López, J. La España de las Piscinas, pp: 137-190 Esteban Noguera, J. (2011) La extensión de la ciudad: el suelo urbanizable. En Esteban Noguera, J. La ordenación urbanística: conceptos, herramientas y prácticas. Electa pp: 117-145 Glaeser, E. Nuestra especie Urbana. Introducción en Glaeser, E. (2011) El triunfo de las ciudades Taurus pp: 1-15 González-Cebrián, J. & Ferreira Villar, M. (2013) Criterios de Ordenación e Intervención en Medio Rural. En González-Cebrián, J. & Ferreira Villar, M. (2013) Guía de buenas prácticas para la Intervención en núcleos rurales. Xunta de Galicia, pp: 184-231

Tema 6. Planeamiento y sostenibilidad Lecturas La lectura de una selección de textos extraídos de los siguientes libros complementará y consolidará los conceptos propuestos en la sesión expositiva. Fariña Tojo, J. (1998) Un acercamiento ecológico a la ciudad. En La ciudad y el medio natural. Akal, pp: 281-310 Higuera, E. (2009) Ordenanzas ambientales. En El Reto de la Ciudad Habitable y Sostenible. DAPP, pp: 103-129 Ezquiaga, J.M. & Barros Guerton, J. (2019) Cambio climático, reciclaje urbano y proyecto sostenible. En Rodríguez Álvarez, J. (ed.) La Evaluación de la Sostenibilidad en la Planificación de las Ciudades. Instituto Tecnológico de Galicia, pp: 20-35

Tema 7. Infraestructura energética Lecturas Herce Vallejo, M. & Miró Farrerons, J. (2006) Las infraestructuras energéticas. En El soporte infraestructural de la ciudad. Edicions UPC pp: 85-94 Arizmendi Barnes, J. L. (1993) Distribución de energía eléctrica pública. En Instalaciones Urbanas. Infraestructura y planeamiento. Bellisco pp: 721-775

Tema 8. El ciclo del agua Lecturas Herce Vallejo, M. & Miró Farrerons, J. (2006) Las infraestructuras del agua: saneamiento y distribución de agua potable. En El soporte infraestructural de la ciudad. Edicions UPC pp: 53-84 Arizmendi Barnes, J. L. (1993) Alcantarillado y evacuación de aguas usadas y atmosféricas. Infraestructura y planeamiento. Bellisco pp: 353-385

Tema 9. Movilidad e infraestructura viaria Pozueta Echavarrí, J. (2000) Modelos urbanos y demanda de movilidad. En MOVILIDAD Y PLANEAMIENTO SOSTENIBLE: Hacia una consideración inteligente del transporte y la movilidad en el planeamiento y en el diseño urbano. Cuadernos de Investigación Urbanística, Nº 30 pp: 30-47 Tato Camino, X.M. (2022) El modelo de la ciudad de Pontevedra. Artículo en ¿Ciudades que caminan? <https://ciudadesquecaminan.org/blog/panorama/el-modelo-de-la-ciudad-de-pontevedra/> BCN Ecología (2021) Movilidad y espacio público. En 20 Años de la Agencia de Ecología Urbana de Barcelona. Ayuntamiento de Barcelona. pp: 166-227

Tema 10. Recuperación de la calle como lugar Lectura: Pozueta Echavarrí, J.

LamíquizDaudén, F. Porto Schettino, M. (2009) Consideración de los peatones en los planes parciales o de área. En La ciudad paseable. CEDEX pp:159-302

Sanz Alduán, A. (2008) Las Técnicas de calmar de tráfico. En Calmar el tráfico. Pasos para una nueva cultura de la movilidad urbana. D.G. de Planificación; Centro de Publicaciones, Ministerio de Fomento. pp:75-168

Prinz, D. (1986) Tráfico Rodado. Capítulo en Planificación y Configuración Urbana. Gustavo Gili. pp: 96-119

Tema 11. El espacio público y colectivo Lectura Montgomery, C. Capítulo 7: Convivencias. Capítulo en (2023) Ciudad Feliz: Transformar la vida a través del diseño urbano. Capitán Swing pp:150-180

aprox Gehl, J. (2014) La ciudad a la altura de los ojos. En Ciudades para la gente. Ediciones infinito pp:118-192

Tema 12. La sostenibilidad en el proyecto de urbanización Lecturas AAVV (2019) Casos de estudio de la Fase de Adaptación de BREEAM Urbanismo: PRAU Marqués de la Ensenada, Eco-Barrio en Vallecas y Parque Central de Valencia. En Rodríguez Álvarez, J. (ed.) La Evaluación de la Sostenibilidad en la Planificación de las Ciudades. Instituto Tecnológico de Galicia, pp: 166-216

Higueras, E. (2009) El urbanismo bioclimático. En El Reto de la Ciudad Habitable y Sostenible. DAPP, pp: 88-102



Complementary

Textos seleccionados - lecturas complementarias

Tema 1. Introducción: teoría y práctica en el urbanismo contemporáneo

Busquets, J. Nuevas tendencias en la arquitectura contemporánea. Capítulo en Busquets, J. (2022) *Arquitectura Moderna y Ciudad. Una inmersión rápida*. PP: 225-253

Sánchez de Madariaga, I. (2008) *La práctica del urbanismo*. En Sánchez de Madariaga, I. *Esquinas Inteligentes. La ciudad y el urbanismo moderno*. Alianza Editorial pp: 119-156

Secchi, B. (2015) *La ciudad de los ricos y la ciudad de los pobres*. Catarata. Capítulos 8-9, pp: 76-89

Tema 2. Herramientas SIG aplicadas al urbanismo -Graser, A. & Peterson, G.N. (2018) *QGIS Map Design*. Locate Press

-Singleton, A. Spielman, S. & Folch, D.C. (2018) *Urban Analytics*. SAGE Publications

Tema 3. El instrumental básico de la ordenación urbanística

Decreto 143/2016, do 22 de setembro, polo que se aproba o Regulamento da Lei 2/2016, do 10 de febreiro, do solo de Galicia.

Font Arellano, A. (2011) *La práctica del planeamiento urbanístico*. En Moya González, L. *La práctica del Urbanismo*. Editorial Síntesis Gallego Jorrete, M. (2015) *Reflexión sobre o proceso urbanizador das áreas dinámicas*. En Lois, R.C. e Pino, D. *A Galicia Urbana*. Galaxia

Lei 2/2016, do 10 de febreiro, do solo de Galicia

Tema 4. La ciudad existente

Ajuntament de Barcelona (1996) *Barcelona. La Segunda Renovación*. Ajuntament de Barcelona

Buchanan, C. (1968) *Bath a Study in Conservation*. HMSO

Busquets, J., & Correa, F. (2006). *Core Retrofitting. Revitalización Urbana*. En *Ciudades: X formas: una nueva mirada hacia el proyecto urbanístico*. Harvard University. Nicolodi. pp: 244-283

Campos Venuti, G. & Oliva, F. (1994) *Cincuenta Años de Urbanística en Italia, 1942-1992*. BOE

Sabaté, J. Corominas, M. Sotoca, A. (2012) *Planes muy especiales*. Colegio de Arquitectos de Cataluña

Ezquiaga Domínguez, J.M. & González Alfaya, L. (2011) *Transformaciones urbanas sostenibles*. Universidad Internacional Mendéndez Pelayo

Fainstein, S. (2001) *The City Builders. Property Development in New York and London, 1980-2000*. Second Edition, Revised. The University Press of Kansas

Solá-Morales, C. & Cadaval, E. (2008) *Barcelona, Transformación. Planes y Proyectos*. Ajuntament de Barcelona.

Urban Task Force (1999) *Towards an Urban Renaissance. Final Report of the Urban Task Force chaired by Lord Rogers of Riverside*. Department of the Environment, Transport and the Environment.

Tema 5. De lo urbano a lo rural

Busquets, J (1985) *La escala intermedia. Nueve planes catalanes*. UR nº2

Dalda, J. L. Docampo, M. G. & Harguindey, J.G. (2006) *Cidade Difusa en Galicia*. Xunta de Galicia

Dalda, J.L. (1991) *La larga fase de aldea*. En González-Cebrián, J. DRU 3. *Intervención sobre el Medio Rural de Galicia. Una aproximación a su realidad territorial*. Universidade da Coruña

del Caz Enjuto, R. Gigoso Pérez, P. Saravia Madrigal, M. (2004) *Planes parciales residenciales: manual profesional*. Junta de Castilla y León

Font, A. (2007) *La explosión de la ciudad: transformaciones territoriales recientes en las regiones urbanas de la Europa Meridional*. Ministerio de Vivienda

González-Cebrián, J. & Ferreira Villar, M. (2009) *Intervenir sobre el medio rural en Galicia: Una aproximación a su realidad territorial*. En González-Cebrián, J. DRU 3. *Intervención sobre el Medio Rural de Galicia. Una aproximación a su realidad territorial*. Universidade da Coruña

López de Lucio, R. (2007) *Construir la ciudad en la periferia: criterios de diseño para áreas residenciales sostenibles*. Marea Libros

Marcinkoski, C. (2016) *The city that never was*. Princeton Architectural Press

Muñoz, F. (2008). *Urbanalización: paisajes comunes, lugares globales*. Gustavo Gili

Rodríguez-Tarduchy, M.J. & Altozano García, F. (2014) *Función y Diseño. Una aproximación metodológica al proyecto urbano*. Cinter Divulgación Técnica.

Tema 6. Planeamiento y sostenibilidad

BCN Ecología (2021) *20 Años de la Agencia de Ecología Urbana de Barcelona*. Arquine Bettini, V. (1998) *Elementos de Ecología Urbana*. Editorial Trotta

Fariña Tojo, J., & Naredo, J. M. (2010). *Libro blanco de la sostenibilidad en el planeamiento urbanístico español*. Guallart, V. (2012) *La ciudad autosuficiente. Habitar en la sociedad de la información*. RBA

Higueras, E. (2006) *Urbanismo Bioclimático*. Gustavo Gili

Higueras, E. (2009) *El Reto de la Ciudad Habitable y Sostenible*. DAPP

Martinez Sarandeses, F. (1982) *Arquitectura Vernácula en Pontevedra*. Colegio de Arquitectos de Galicia

McHarg, I. (1969) *Proyectar con la naturaleza*. Gustavo Gili

Rodríguez Álvarez, J. (ed. 2019) *La Evaluación de la Sostenibilidad en la Planificación de las Ciudades*. Instituto Tecnológico de Galicia.

Rogers, R. & Gumuchdian, P. (2008) *Ciudades para un pequeño planeta*. Gustavo Gili

Terradas, J. (2001) *Ecología Urbana*. Rubes

Tema 7. Infraestructura energética

Acebilló, J. (2012). *A New Urban Metabolism*. ACTAR Publishers.

Brown, H. (2014). *Next generation infrastructure*. Washington, DC: Island Press.

Chrysoulakis, N., de Castro, E. A., & Moors, E. J. (Eds.). (2014). *Understanding urban metabolism: a tool for urban planning*. Routledge.

Cody, B. (2017). *Form Follows Energy: Using natural forces to maximize performance*. Birkhäuser.

Dunster, B. (2018) *ZEDlife. How to Build a Low-Carbon Society Today*. RIBA Publishing

García-Germán, J. (Ed.). (2009). *De lo mecánico a lo termodinámico: por una definición energética de la arquitectura y del territorio*. Gustavo Gili.

Grulois, G., Tosi, M. C., & Crosas, C. (2018). *Designing Territorial Metabolism: Barcelona, Brussels and Venice*. Jovis.

Guallart, V. (2014). *La ciudad autosuficiente*. RBA Libros.

Tema.



8 El ciclo del agua Brown, H. (2014). Next generation infrastructure. Washington, DC: Island Press. De Meulder, B. & Shannon, K. eds. (2008) Water Urbanisms Ufo_Urbanism Fascicles OSA SUN Dreiseitl, H. Grau, D. (2009) Recent Waterscapes: Planning, Building and Designing with Water. Birkhäuser, Switzerland Nárdiz, C., & Valeiro, C. (2002). El abastecimiento de agua a La Coruña. El papel del servicio de aguas en la construcción de la ciudad. Palomo, P. J. S. (2003). La planificación verde en las ciudades. Gustavo Gili. Rodríguez-Rojas, M. I. (2017). Guía para la integración de los Sistemas Urbanos de Drenaje Sostenible en el proyecto urbano. Guía para la integración de los sistemas urbanos de drenaje sostenible en el proyecto urbano, 1-127. Santos Vázquez, A. (2017) La gestión del agua y su influencia en la construcción del territorio. Tesis doctoral Universidade da Coruña Swyngedouw, E. (2015). Liquid power: Contested Hydro-Modernities in Twentieth-Century Spain. MIT Press. Tema.9. Movilidad e infraestructura viaria Towns: A study of the long term problems of traffic in urban areas. Routledge. Crowe, S. (1960) The Landscape of Roads. The Architectural Press: London Español-Echaniz, I. M., Álvarez-Sala, D., Fernández-Belmonte, D., & González-del-Piñal-Gómez, C. (2008). La carretera en el paisaje. Criterios para su planificación, trazado y proyecto. Junta de Andalucía Herce Vallejo, M. & Miró Farrerons, J. (2006) El soporte infraestructural de la ciudad. Edicions UPC McCluskey, J. (1979). Road form and townscape. Publication of: Architectural Press Limited. Monzón, A., Cascajo, R., Madrigal, E., & López, C. (2006). Guía práctica para la elaboración e implantación de planes de movilidad urbana sostenible. Madrid: Instituto para la Diversificación y Ahorro de la Energía, IDAE. Nárdiz Ortiz, C. (1992). El territorio y los caminos en Galicia. Planos históricos de la red viaria. Colegio de Ingenieros de Caminos, Canales y Puertos de Galicia/Xunta de Galicia, Colección de Ciencias, Humanidades e Ingeniería. Nebot Beltrán, F. (2019) Primero la Ciudad. La movilidad en Pontevedra 1999-2019. Ayuntamiento de Pontevedra. Sanz, A. & Vega, P. & Mateos, M. (2014) Cuentas ecológicas del transporte en España. Libros en Acción. Shannon, K., & Smets, M. (2010). The landscape of contemporary infrastructure. NAI Publishers. Tonucci, F. (2014) A Cidade dos nenos. Kalandraka VVAA (2003). Road ecology: science and solutions. Island press. Tema 10. Recuperación de la calle como lugar AAVV (2010) La U Urbana. El libro blanco de las calles de Barcelona. Ajuntament de Barcelona. Appleyard, D. (1980). Livable streets: protected neighborhoods?. The ANNALS of the American Academy of Political and Social Science, 451(1), 106-117 Ayto de Pontevedra (2016) +modelo Pontevedra. Estrategia de desarrollo urbano sostenible e integrado de Pontevedra Buchanan, C. (ed2015). Traffic in Towns: A study of the long term problems of traffic in urban areas. Routledge Gehl, J. (2006) La humanización del espacio urbano. Editorial Reverté. Madrid Jacobs, A. B. (1993). Great streets. Marshall, S. (2004). From streets to patterns. In Streets and Patterns (pp. 235-258). Routledge. McCluskey, J. (1979). Road form and townscape. Publication of: Architectural Press Limited. NACTO., I. (2013). Urban street design guide. Island Press/Center for Resource Economics Newman, O. (1972) Creating Defensible Space. Institute for Community Design Analysis NLA (2019) Future Streets. New London Architecture. Pozueta Echavarrí, J. Lamíquiz Daudén, F. Porto Schettino, M. (2009) La ciudad paseable. CEDEX Prinz, D. (1986) Planificación y configuración urbana. Gustavo Gili Sanz Alduán, A. (2008) Calmar el tráfico. Pasos para una nueva cultura de la movilidad urbana. D.G. de Planificación; Centro de Publicaciones, Ministerio de Fomento. Tema 11. El espacio público y colectivo Auge, M. (1995). Los no lugares. Espacios del anonimato. Una antropología sobre la modernidad. Gedisa. Friedberg, M.P. & Berkeley, E.P. (1970) Play and Interplay. A Manifesto for New Design in Urban Recreational Environment. Macmillan Co. Gehl, J. (2006) La humanización del espacio urbano. Editorial Reverté. Madrid Gehl, J., & Svarre, B. (2013). How to study public life. Island Press. Hurtwood, L. A. O. (1971). Planning for play. Thames & Hudson. Koolhaas, R. (1995) ?The Generic City?. En S,M,L,XL. The Monacelli Press Manzini, E. (2015) Design, When Everybody Designs. An Introduction to Design for Social Innovation. MIT Press Muñoz, F. (2008). Urbanización: paisajes comunes, lugares globales. Gustavo Gili Navés Viñas, F., Solanich, J. P., Argimon, X., Montlló, L. S., & Carol, L. R. (1992). El árbol en jardinería y paisajismo: guía de aplicación para España y países de clima mediterráneo y templado. Omega. Nolasco-Cirugeda, A. Serrano-Estrada, L. & Martí Ciriquián, P. (2014) The Study of Public Space. Bubok. Sennett, R. (2019). Construir y habitar: ética para la ciudad. Anagrama. Spirn, A. W. (1998). The language of landscape. Yale University Press. SWA (2019) Field Guide to Life in Urban Plazas. A Study in New York City. Venturi, R. (1982). Complejidad y contradicción en la arquitectura. Barcelona: Gustavo Gili. Tema 12. La sostenibilidad en el proyecto de urbanización BCN Ecología (2021) 20 Años de la Agencia de Ecología Urbana de Barcelona. Arquine Bettini, V. (1998) Elementos de Ecología Urbana. Editorial Trotta Coyle, M. (2016) Modern Urban Landscapes. Creating Energy-Efficient Designs. Images Publishing Dunster, B. (2018) ZED Life. How to build a Low Carbon Society Today. RIBA Publishing. Fariña Tojo, J. (1998) La ciudad y el

medio natural. Akal Guerra Macho, J.J. (1994) Control Climático en Espacios Abiertos. Evaluación del Proyecto Expo 92. CIEMAT Hernández Partal, S. & de Santiago-Rodríguez, E. (2019) Las sinergias entre la Agenda Urbana Española y otras agendas y estrategias. Ciudad y Territorio Estudios Territoriales. (202) pp:835-846 Higuera, E. (2006) Urbanismo Bioclimático. Gustavo Gili Higuera, E. (2009) El Reto de la Ciudad Habitable y Sostenible. DAPP Hillebrandt, A., Riegler-Flores, P., Rosen, A., & Seggewies, J. K. (2019). Manual of Recycling. In Manual of Recycling. DETAIL. Rodríguez Álvarez, J. (ed. 2019) La Evaluación de la Sostenibilidad en la Planificación de las Ciudades. Instituto Tecnológico de Galicia. Tabb, P.J. (2021) Biophilic Urbanism. Designing Resilient Communities for the Future. Routledge Terradas, J. (2001) Ecología Urbana. Rubes Zeunert, J. (2017) Landscape Architecture and Environmental Sustainability. Creating Positive Change Through Design. Bloomsbury Visual Arts.



Recommendations

Subjects that it is recommended to have taken before

Urbanism 1/630G02018
Urbanism 4/630G02032
Urbanism 3/630G02029
Urbanism 2/630G02024

Subjects that are recommended to be taken simultaneously

Architectural Design 8/630G02036

Subjects that continue the syllabus

Territorial Planning/630G02057
Landscape and Sustainable Habitat/630G02056
Contemporary Urban Actions/630G02060

Other comments

Following Higher Education Regulations the gender perspective will be taken into account in this course

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