



## Teaching Guide

Identifying Data					2020/21
Subject (*)	Complex Scale Architecture	Code	630G02058		
Study programme	Grao en Estudos de Arquitectura				
Descriptors					
Cycle	Period	Year	Type	Credits	
Graduate	2nd four-month period	Fifth	Optional	4.5	
Language	Spanish				
Teaching method	Face-to-face				
Prerequisites					
Department	Proxectos Arquitectónicos, Urbanismo e Composición				
Coordinador	Sabin Díaz, Patricia	E-mail	patricia.sabin@udc.es		
Lecturers	Penela Fernández, Alfonso Carlos Sabin Díaz, Patricia	E-mail	alfonso.penela@udc.es patricia.sabin@udc.es		
Web					
General description	<p>The concept of "scale" in Architecture refers, in the words of Anish Kapoor, to a number of abstract proportions that on the one hand are related, at a certain level, the body, the physical, and on the other, more intense, with the imagination . Complexity does not lie exclusively in size, function or artifice, but in the multiplicity of relationships that an architectural object establishes with its physical, environmental, social, human and cultural environment.</p>				
Contingency plan	<p>In the event that there are exceptional circumstances that prevent the expected face-to-face teaching, considering the step of this non-face-to-face teaching modality based on the ICT support provided by the University. The ICT toolkit, made available by the University, will be used, especially the Moodle platform, Teams and the electronic mail for communication to the students.</p> <ol style="list-style-type: none"><li>Changes in content The contents are not modified</li><li>Methodologies The methodologies of the course are maintained, finding the non-presential teaching tools in those made available by the UDC.</li><li>Mechanisms for personalized attention to students. Teams, Moodle and other tools from the UDC. According to the academic calendar and schedule set by the center at the beginning of the course.</li><li>Modifications in the evaluation Modifications in the evaluation. None. Those criteria that imply attendance and face-to-face teaching will be removed. This principle will be valid temporally from the moment there is an instruction to apply this Contingency Plan. The rest of the evaluation maintained. For students with justified difficulties it will be possible to find personalized and alternative solutions</li><li>Modifications of the bibliography or webgraphy. No modifications are made.</li></ol>				

## Study programme competences / results

Code	Study programme competences / results
A17	Ability to apply technical and construction standards and regulations
A30	Knowledge of the organization of professional offices
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)
A67	Coñecemento avanzado de aspectos específicos da materia de Proxectos 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
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		
Take this subject permitirá or student achegarse or feito arquitectónico den de plantexmentos and multidisciplinary optics, incorporating respostas aha series of conditions and variables increasingly complex and confusing. Complementará or desenrolo programmatic das asignaturas da area de Proxectos Arquitectónicos.	A17	B1	C1
	A30	B2	C3
	A34	B3	C4
	A35	B4	C5
	A67	B5	C6
			C7
			C8

Contents	
Topic	Sub-topic
1. ARCHITECTURE FOR LARGE SCALES	1.1 Territory and planning. 1.2 Landscape and infrastructures. 1.3 Underground architectures. 1.4 Language and dimension in architecture. 1.5 Building in height: the skyscraper.
2.THE COMPLEX FUNCTION. SPECIFIC PROGRAMS	2.1 Architectures for transportation. 2.2 Health and care architecture. 2.3 Spaces for work. 2.4 Architectures for the industry. 2.5 Architectures for large events.



3.THE COMPLEX FORM. NEW TOOLS FOR ARCHITECTURAL DESIGN	<p>3.1 Fractal geometries.</p> <p>3.2 The new sciences of complexity.</p> <p>3.3 Non-linear dynamics, chaos theory and self-organized systems.</p> <p>3.4 Parametric design.</p> <p>3.5 Architectures and virtual worlds.</p>
4. ARCHITECTURES IN COMPLEX ENVIRONMENTS	<p>4.1 Architecture in extreme conditions.</p> <p>4.2 Nomad architecture</p> <p>4.3 Architecture and identity.</p> <p>4.4 Architectures in the peripheries.</p>
5. TOOLS AND MANAGEMENT SYSTEMS OF THE COMPLEX PROJECT	<p>5.1 Management of multidisciplinary teams</p> <p>5.2 Platforms and project management environments</p> <p>5.3 Contracting and administrative processing</p>

Planning				
Methodologies / tests	Competencies / Results	Teaching hours (in-person & virtual)	Student?s personal work hours	Total hours
Introductory activities	B5 C8	1	4	5
Guest lecture / keynote speech	B10 B11	6	0	6
Directed discussion	B1 B5 C1 C7	5	0	5
Field trip	B10 B11 C8	4	0	4
Workshop	A17 A30 A34 A35 A67 B2 B3 B4 C3 C4 C5 C6	20	40	60
Student portfolio	A17 C7	10	12.5	22.5
Personalized attention		10	0	10

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

Methodologies	
Methodologies	Description
Introductory activities	Activities that are carried out before initiating any teaching-learning process in order to know the competences, interests and / or motivations that the student has for the achievement of the objectives that are to be achieved, linked to a training program. With it, it is intended to obtain relevant information that allows articulating teaching to favor effective and meaningful learning, based on previous knowledge.
Guest lecture / keynote speech	Oral presentation, complemented by the use of audiovisual media and the introduction of some questions addressed to students, in order to transmit knowledge and facilitate learning. The magisterial session is also known as a lecture, expository method or lecture. This last modality is usually reserved to a special type of lesson given by a teacher on special occasions, with a content that supposes an original elaboration and based on the almost exclusive use of the word as a way of transmitting the information to the audience.
Directed discussion	Group dynamics technique in which the members of a group discuss freely, informally and spontaneously on a topic, although they can be coordinated by a moderator.



Field trip	The field exit, understood as a strategy that consciously brings the individual closer to reality, is a valuable teaching and learning opportunity for students, by enhancing the observation process, gathering information, interpreting, posing conjectures, explanations and projections that allow them to interpret their social environment and cultural context.
Workshop	Project Workshop: Training mode oriented to the application of learning in which knowledge of various subjects is introduced, always around an architectural project, where different methodologies / tests can be combined (exhibitions, simulations, debates, problem solving, practicals guided, etc.) through which students develop practical tasks on a specific topic, with the support and supervision of the teaching staff of the subjects involved.
Student portfolio	<p>The final result of the work done in the subject will be reflected in the student's personal and physical digital portfolios, physically available on paper and accessible through the computer tool for teaching Moodle.</p> <p>The results are evaluated, but through a tutored and guided teaching process, where the personal effort and the intellectual evolution of the student should be reflected in the final documentation.</p>

**Personalized attention**

Methodologies	Description
Student portfolio Directed discussion Workshop	<p>The student receives personalized attention regarding the work they are developing in the subject and in the Workshop, through the teacher or teachers of the group to which they have been assigned. In the Workshop, in addition, you will have the possibility to comment and obtain critical reviews by the other groups, in order to contrast opinions and criteria to confront them with your own.</p> <p>The student's portfolio (see step 5. -Final student work-) will be subject to personalized reviews, to observe its evolution and verify its authorship.</p> <p>Teaching to students of mobility programs will be adapted to pedagogical conditions and special supervised work, as well as assessment tests and exams.</p>

**Assessment**

Methodologies	Competencies / Results	Description	Qualification
Student portfolio	A17 C7	<p>The final result of the work carried out in the subject will be reflected in the student's personal portfolio, available and accessible through the Moodle teaching platform.</p> <p>The results are evaluated, but through a tutored and guided teaching process, where the personal effort and the intellectual evolution of the student should be reflected in the final documentation.</p>	50
Workshop	A17 A30 A34 A35 A67 B2 B3 B4 C3 C4 C5 C6	Methodology designed to promote learning - both autonomous and collaborative - of students, under the tutelage of the teacher and in varied scenarios (academic, professional and competitive). It is referred primarily to the learning of "how to do things". It is an option based on the assumption by students of the responsibility of their own learning.	50

**Assessment comments**



To pass the subject in the June opportunity it will be necessary:

- Have minimum attendance 80% and correction of the classes with active participation in both the joint and individual revision classes of the works. (Minimum correction will be necessary for the satisfactory development of the exercise / s.)
- Deliver the work in time and form (in accordance with the subject's calendar) and obtain a minimum grade of 4 in each exercise, and an average of 5.

To pass the subject in the July opportunity it will be necessary:

- Have minimum attendance / correction of the classes with active participation in both the joint and individual revision classes of the works.
- Deliver on time and form the work during the course. To agree to its modification during the months of June-July if the rating does not exceed 4 in each exercise, and an average of 5.
- Make those partial or global corrections of the exercise / s for its satisfactory development.

### Sources of information

<b>Basic</b>	<ul style="list-style-type: none"> <li>- Ludovico Quaroni (1980). PROYECTAR UN EDIFICIO. OCHO LECCIONES DE ARQUITECTURA . Madrid: Xarait</li> <li>- Ignasi de Solá-Morales (2003). TERRITORIOS. Barcelona: Gustavo Gili</li> <li>- Rem Koolhaas (2006). LA CIUDAD GENÉRICA. Barcelona: Gustavo Gili</li> <li>- Rafael Moneo (2004). INQUIETUD TEORICA Y ESTRATEGIA PROYECTUAL EN LA OBRA DE OCHO ARQUITECTOS CONTEMPORANEOS . Barcelona: Actar</li> <li>- Peter Zumthor (2014). PENSAR LA ARQUITECTURA . Barcelona: Gustavo Gili</li> </ul>
<b>Complementary</b>	<ul style="list-style-type: none"> <li>- Steen Eiler Rasmussen (2004). LA EXPERIENCIA DE LA ARQUITECTURA: SOBRE LA PERCEPCION DE NUESTRO ENTORNO. Barcelona: Reverte</li> <li>- Josep María Montaner (2008). SISTEMAS ARQUITECTONICOS CONTEMPORANEOS . Barcelona: Gustavo Gili</li> <li>- Josep Muntañola i Thornberg (2004). ARQUITECTURA, MODERNIDAD Y CONOCIMIENTO. Barcelona: Edicions UPC</li> </ul>

### Recommendations

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

Architectural Design 5/630G02021  
 Architectural Design 4/630G02016  
 Architectural Design 2/630G02006  
 Architectural Design 3/630G02011  
 Architectural Design 7/630G02031  
 Architectural Design 1/630G02001  
 Architectural Design 6/630G02026

#### Subjects that are recommended to be taken simultaneously

Architectural Design 9/630G02041  
 Architectural Design 8/630G02036

#### Subjects that continue the syllabus

Final Degree Work/630G02059

#### 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.