UNIVERSIDADE DA CORUÑA

Teaching Guide				
Identifying Data				2016/17
Subject (*)	Análise de Formas Arquitectónicas		Code	630G02007
Study programme	Grao en Estudos de Arquitectura			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	First	Obligatoria	6
Language	SpanishEnglish			
Teaching method	Face-to-face			
Prerequisites				
Department	Representación e Teoría Arquitectónica			
Coordinador	Mantiñan Campos, Carlos	E-mail	carlos.mantinan@udc.es	
Lecturers	Amado Lorenzo, Antonio Gonzalo Fernandez-Gago Longueira, Paula Fraga Lopez, Fernando Fraga Lopez, Francisco Javier Mantiñan Campos, Carlos Perez Cid, Miguel angel	E-mail	antonio.amado@udc.es paula.fernandez-gago@udc.es fernando.fraga@udc.es javier.fraga@udc.es carlos.mantinan@udc.es miguel.pcid@udc.es	
Web	http://www.ryta-udc.es/			
General description	The aim of this subject is to consolidate student knowledge and skills in relation to graphic architectural representation, with particular emphasis on FreeHand drawing practice.			

Study programme competences	
Code	Study programme competences
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
A4	Knowledge of the analysis and the theory of form and the laws of visual perception adapted and applied to architecture and urbanism
A6	"Knowledge of graphic surveying techniques at all stages, from the drawing sketches to scientific restitution, adapted and applied to architecture and urbanism "
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
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
B6	Knowing the history and theories of architecture and the arts, technologies and human sciences related to architecture
B7	Knowing the role of the fine arts as a factor that influences the quality of architectural design
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	Expressing themselves correctly, both orally and in writing, in the official languages of the autonomous region
C2	Mastering the expression and comprehension of a foreign language both orally and in writing
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 enterpreneur
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		
Ability to apply graphic representation systems. Ability to handle projection and section systems. Ability to handle the quantitative and selective aspects of the scale. Ability to establish the relationship between the plane and depth.	A1	B2 B3 B4 B5 B6 B7 B12	C1 C2 C3 C4 C5 C6 C7 C8
Ability to conceive and represent the figure, color, texture and brightness and also dominate the objects proportion. Knowlege of the drawing techniques -including the computer ones-, all of them fundamental to the correct approach to the projectual skill, a prelude to the project representation. Detailed study of the stages of graphic learning, from the initial preceptual stage tthe final creative representation.	A2	B2 B3 B4 B5 B6 B7 B12	C1 C2 C3 C4 C5 C6 C7 C8
Knowledge and understanding of systems of spatial representation and their relation to the processes of graphical conceptualisation and visualisation of the different stages of architectural and urban design.	A3	B2 B3 B4 B5 B6 B7 B12	C1 C2 C3 C4 C5 C6 C7 C8
Knowledge and understanding of the laws of proportion and visual perception, theories of form and image, aesthetic theories of colour, and phenomenological analysis of architectural and urban form.	A4	B2 B3 B4 B5 B6 B7 B12	C1 C2 C3 C4 C5 C6 C7 C8
Knowledge, understanding and use of graphic surveying and measurement techniques in relation to all stages of the design process for buildings and natural and urban environments, from sketchpad to scientific restoration.	A6	B2 B3 B4 B5 B6 B7 B12	C1 C2 C3 C4 C5 C6 C7 C8

Ability to apply knowledge and skills in relation to Systems of Representation, Spatial Representation, Graphical Conceptualisation, Analysis of Forms and Graphical Restoration, for the production, presentation and defence before a University Board of Examiners of an original piece of academic work based on the student?s own research in relation to any of the areas covered by the course.	A63	B2 B3 B4 B5 B6 B7 B12	C1 C2 C3 C4 C5 C6 C7 C8

Contents	
Topic	**Sub-topic**
ANALYSING ARCHITECTURAL FORM THROUGH FREEHAND DRAWING	Laws of proportion and visual perception. Theories of form and image, and aesthetic theories of colour. Analysis and description of architectural forms and spaces, with examples from contemporary and historical architecture. The human figure in architectural representation. Graphical research, analysis and representation of architectural and urban forms. Freehand drawing and sketching . Empleo y manejo de distintas técnicas y formatos.
SKETCHING AND GRAPHIC SURVEY	Sketching and freehand drawing techniques Sketching and drawing on location from direct observation Graphic survey and measurement techniques: from sketchpad to scientific restoration
CREATIVE REPRESENTATION AND GRAPHICAL CONCEPTUALISATION	Graphical learning and creative representation Architectural design presentations Laying out drawings

Planning				
Methodologies / tests	**Competencies**	**Ordinary class hours**	**Student?s personal work hours**	**Total hours**
Supervised projects	A1 A2 A3 A4 A6 A63 B2 B3 B4 B5 B6 B7 B12 C1 C2 C3 C4 C5 C6 C7 C8	14	45	59
Workshop	A1 A2 A3 A4 A6 A63 B2 B3 B4 B5 B6 B7 B12 C1 C2 C3 C4 C5 C6 C7 C8	30	45	75
Guest lecture / keynote speech	A1 A2 A3 A4 A6 A63 B2 B3 B4 B5 B6 B7 B12 C1 C2 C3 C4 C5 C6 C7 C8	15	0	15
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**

Supervised projects	Students will be required to complete one or more assignments during the non-class hours (45) allocated for these activities. This section of the course focuses on learning ?how things are done? and the promotion of supervised independent learning. Class contact hours (14) will be used for the proposal and discussion of project topics and related theoretical considerations. Class time will also include a series of group and/or individual project monitoring sessions.
Workshop	The workshop section of the module includes both class time practice sessions (30 hours) and non-class time (54 hours) spent on workshop tasks assigned by the lecturer. As in the case of supervised project work, workshop tasks are focused on learning ?how things are done? and encouraging supervised independent learning. Students will be required to produce a set amount of graphical work (defined in advance by the lecturer) during the hours allocated for workshop activities. Workshop activities will be based on the following categories and assessed individually, with each task accounting for a specific portion of the overall mark: 1) Presential class work (ordinary class hours) 2) Weekly practical tasks (student´s personal work hours) 3) Final assessment control drawings (final exam)
Guest lecture / keynote speech	Oral presentation, using audiovisual aids and other resources, intended to convey knowledge and encourage learning. Theoretical content will be divided according to the module?s two main subject areas and taught using a non-linear approach, based on the make-up of the group and the learning objectives proposed by the lecturer.

Personalized attention	
Methodologies	**Description**
Guest lecture / keynote speech Supervised projects Workshop	Individualised attention refers to one-to-one meetings between lecturers and students, or small group tutoring sessions, designed to offer guidance, support and motivation to students throughout the learning process, and an opportunity to discuss any questions or difficulties they may have in relation to specific module tasks and activities. For this section of the module, as in the other sections, students will be required to keep the lecturer informed as to the progress of their assignments, to ensure projects meet the necessary standards in each case. Given the emphasis on personalised teaching and learning in this module, students will be strictly required to avail of all opportunities for engagement offered by the syllabus. Students who fail to attend the weekly tutorial meetings (1 hour/semester) defined in the timetable will be recorded as ?no-shows? and have their assessment deferred to a subsequent examination period.

Assessment			
Methodologies	**Competencies**	**Description**	**Qualification**

Guest lecture / keynote speech	A1 A2 A3 A4 A6 A63 B2 B3 B4 B5 B6 B7 B12 C1 C2 C3 C4 C5 C6 C7 C8	Class attendance is compulsory for this section of the subject. Students will be required to attend a minimum 80% of all classes; absences due to illness or other unforeseen circumstances should not exceed the remaining 20%. Students who fail to attend this 80% to all classes will be recorded as ?Absent (NP)?. Assessment for this section of the module will will be averaged to give the student?s overall mark for this section of the module based on questionnaires (MCQ, short answer questions, etc.) done at the end of the theoretical sessions. These questionnaires will check student´s academic progress in this methodology. The mark for this section will account for 5% of the total final mark for the module	5
Supervised projects	A1 A2 A3 A4 A6 A63 B2 B3 B4 B5 B6 B7 B12 C1 C2 C3 C4 C5 C6 C7 C8	Class attendance is compulsory for this section of the subject. Students will be required to attend a minimum 80% of all classes; absences due to illness or other unforeseen circumstances should not exceed the remaining 20%. However 100% of all assigned work in this methodology should be done. Aggregated marks for all supervised projects will be weighted to give the student?s overall mark for this section of the module. Supervised projects will account for 15% of the total final mark for the module.	15
Workshop	A1 A2 A3 A4 A6 A63 B2 B3 B4 B5 B6 B7 B12 C1 C2 C3 C4 C5 C6 C7 C8	Class attendance is compulsory for this section of the subject. Students will be required to attend a minimum 80% of all classes; absences due to illness or other unforeseen circumstances should not exceed the remaining 20%. However 100% of all assigned work in this methodology should be done. Total aggregated marks for workshop tasks in each category will account for the following percentages of the total final mark for the module: 1) Class work (ordinary class hours) and weekly practical tasks (student´s personal work hours): 30% 2) Final assessment control drawings (final exam): 50%. The content of the final exam will be agreed jointly between all teachers on the interactive portion of the module. All practical work (tests) will be evaluated by the whole staff of lecturers of the subject to guarantee the homogeneity of the level in all the subgroups. Workshop activities will account for 80% of the total final mark for the module.	80

Assessment comments

In order to pass the module, either during the first-opportunity term exams in June, or during the second-opportunity examination period in July, students required to have done 100% of all assigned work in each methodology, and achieve the minimum specified mark for each of the compulsory assignments, under the appropriate direction and supervision of the lecturer. Students who fail to meet this requirement will be recorded as ?Absent (NP)? and have their assessment deferred to a subsequent examination period.

Project supervision will only be deemed to have taken place where the supervising lecturer can confirm that student work on projects during class time is consistent with work completed outside of class hours. This condition will apply particularly in the case of students assessed during the second-opportunity examination period only (in July); they will be strictly required to do all the assigned work during the course with particular emphasis to the lecturer supervision of all these tasks.

Students who fail to attend at least 80% of lectures and practical (workshop and supervised project) classes will be recorded as ?Absent (NP)? and have their assessment deferred to a subsequent examination period.

Given the emphasis on personalized teaching and learning in this module, students will be strictly required to avail of the opportunities for engagement offered by the syllabus. Students who fail to attend the weekly tutorial meetings (1 hour/semester) defined in the timetable will be recorded as ?Absent (NP)? and have their assessment deferred to a subsequent examination period.

Teaching, testing and assessment in respect of mobility programme students will be adapted to meet any special circumstances or supervision needs these students may have.

Sources of information

Basic	- Ching, Francis (1982). MANUAL DE DIBUJO ARQUITECTONICO.. México. Ed. G.G. México - Ching, Frank (1989). DRAWING A CREATIVE PROCESS. New York: Van Nostrand Reinhold - Ching, Francis (1999). DIBUJO Y PROYECTO.. México. Ed. G.G. México - Ching, Frank (2010). DESIGN DRAWING. New Jersey: John Wiley & Sons - Ching Frank (2012). INTERIOR DESIGN ILLUSTRATED. New Jersey: John Wiley & Sons - Ching, Frank (2015). ARCHITECTURAL GRAPHICS. New Yersey: John Wiley & Sons - Cooper, Douglas (1992). DRAWING AND PERCEIVING.. Nueva York. Ed. Van Nostrand Reinhold - Cramer, Johannes (1986). CONSTRUCCIÓN. LEVANTAMIENTO TOPOGRAFICO EN LA CONSTRUCCIÓN.. Barcelona, Ed. G.G. - Cullen, Gordon (1964). TOWNSCAPE. London: The Architectural Press - D´Amelio, Joseph (1964). PERSPECTIVE DRAWING HANDBOOK. New York: León Amiel - De Grandis, Luigina (1985). TEORIA Y USO DEL COLOR.. Madrid, Ed. Cátedra - Edwards, Brian W. (1994). UNDERSTANDING ARCHITECTURE THROUGH DRAWING. London: E & FN Spon - Fraser, Iain (1994). ENVISIONING ARCHITECTURE: AN ANALYSIS OF DRAWING. New York: John Wiley & Sons - Gosling, David (1996). GORDON CULLEN: VISIONS OF URBAN DESIGN. London: Academy editions - Hanks, Kurt (2006). RAPID VIZ: A NEW METHOD FOR VISUALIZATION OF IDEAS. Boston: Thomson Course Technology PTR - Jacoby, Helmut (1965). ARCHITECTURAL DRAWINGS. Stuttgart: Gerd Hatje - Jacoby, Helmut (compilado por:) (1974-1981). EL DIBUJO DE LOS ARQUITECTOS. Barcelona: Gustavo Gili - Knoll, W. y Hechinger, M. (1982). MAQUETAS DE ARQUITECTURA: TECNICAS Y CONSTRUCCIÓN.. México. Ed. G.G. México - Martin, Judy (1994). APRENDER A ABOCETAR. Barcelona, Ed. Blume - Mills, Criss B. (2000). DESIGNING WITH MODELS. . Nueva York. Ed. John Wiley & Sons - Moneo, R. y Cortés, J. (1982). COMENTARIO SOBRE 20 ARQUITECTOS DEL SIGLO XX. Barcelona. Ed. U. Politecnica Cataluña - Nikolaides, Kimon (). THE NATURAL WAY TO DRAW. . Boston, Ed. Houghton Mifflin - Porter y Goodman (1983-84-85). MANUAL DE TÉCNICAS GRÁFICAS PARA ARQUITECTOS. VOL 1,2,3 Y 4. Barcelona. Ed. G.G. - Redondo, E. y Delgado, M. (). DIBUJO A MANO ALZADA PARA ARQUITECTOS.. Barcelona. Ed. Parramón - Richards, James (2013). FREEHAND DRAWING & DISCOVERY. Hoboken: John Wiley & Sons - Uddin, M.S. (2000). DIBUJO AXONOMÉTRICO.. México. Ed. McGraw Hill - Uddin, M.S. (2000). DIBUJO DE COMPOSICIÓN.. México. Ed. McGraw Hill
Complementary	

Recommendations
Subjects that it is recommended to have taken before
Xeometría Descritiva/630G02003 Debuxo de Arquitectura/630G02002
Subjects that are recommended to be taken simultaneously
Proxectos 1/630G02001 Xeometría da Forma Arquitectónica/630G02014
Subjects that continue the syllabus
Análise Arquitectónico 1/630G02012 Análise Arquitectónico 2/630G02017
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.