Teaching Guide				
Identifying Data				2015/16
Subject (*)	Analysis on Architectural Form		Code	630G01007
Study programme	Grao en Arquitectura			
Descriptors				
Cycle	Period	Year	Type	Credits
Graduate	2nd four-month period	First	FB	6
Language	Spanish			
Teaching method	Face-to-face			
Prerequisites				
Department	Representación e Teoría Arquitectónica			
Coordinador	Perez Cid, Miguel angel	E-mail	miguel.pcid@udc.es	
Lecturers	Fernandez-Gago Longueira, Paula Fraga Lopez, Fernando Fraga Lopez, Francisco Javier Franco Taboada, Arturo Perez Cid, Miguel angel	E-mail	paula.fernandez-gago@udc.es fernando.fraga@udc.es javier.fraga@udc.es arturo.franco@udc.es miguel.pcid@udc.es	
Web	departamentos.etsa.udc.es/webryta/			
General description	The objective of this course is to settle the student´s knoledge of the architectural graphic representation through basically the practice of FreeHand Drawing.			

Study programme competences / results	
Code	Study programme competences / results
A10	REPRESENTACIÓN ESPACIAL: aptitude ou capacidade para aplicar, tanto manual como informaticamente, os sistemas de representación gráfica, dominando os procedementos de proxección e corte, os aspectos cuantitativos e selectivos da escala e a relación entre o plano e a profundidade.
A13	IDEACIÓN GRÁFICA: aptitude ou capacidade para concibir e representar graficamente a figura, a cor, a textura e a luminosidade dos obxectos e dominar a proporción e as técnicas de debuxo, incluídas as informáticas.
A37	ANÁLISE DE FORMAS: comprensión ou coñecemento das leis da percepción visual e da proporción, as teorías da forma e da imaxe, as teorías estéticas da cor e os procedementos de estudo fenomenolóxico e analítico das formas arquitectónicas e urbanas.
A39	RESTITUCIÓN GRÁFICA: comprensión ou coñecemento das técnicas de medición e levantamento gráfico de edificios e de ámbitos urbanos e naturais en todas as súas fases, dende o debuxo de apuntamentos á restitución científica.
B1	Learn how to learn
B3	Aplicar un pensamento crítico, lóxico e creativo.
B4	Traballar de forma autónoma con iniciativa.
B7	Comunicarse de maneira efectiva nun entorno de traballo.
B8	Visión espacial.
B9	Creatividade.
B10	Sensibilidade estética.
B11	Capacidade de análise e síntese.
B13	Imaxinación.
B14	Habilidade gráfica xeral.
B17	Cultura histórica.
B18	Razoamento crítico.
B19	Traballo nun equipo de carácter interdisciplinar.
C3	Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida.
C6	Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.
C7	Asumir como profesional e cidadán a importancia da aprendizaxe ao longo da vida.

C8	Valorar a importancia que ten a investigación, a innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da sociedade.

Learning outcomes			
Learning outcomes	Study programme competences / results		
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.	A10	B1 B3 B4 B7 B8 B9 B10 B11 B13 B14 B17 B18 B19	C3 C6 C7 C8
Ability to conceive and represent the figure, colour, texture, and brightness and also dominate the objects proportion. Knowledge of the drawing techniques -including the computer ones-, all of them fundamental to the correct approach to the proyectual skill, a prelude to the project representation. Knowledge and understanding of the stages of graphic learning, from the initial perceptual stage to the final creative representation.	A13	B1 B3 B4 B7 B8 B9 B10 B11 B13 B14 B17 B18 B19	C3 C6 C7 C8
Knowledge and understanding of the visual perception and proportion laws, form and image theories, the aesthetic theories of color and procedures of phenomenological and analytical study of the architectural and urban forms.	A37	B1 B3 B4 B7 B8 B10 B11 B13 B14 B17 B18 B19	C3 C6 C7 C8

Knowledge, understanding and management of measurement techniques and graphic survey of buildings and urban and natural áreas at every stage, from drawing sketches to detailesd depiction.	A39	B1 B3 B4 B7 B8 B9 B10 B11 B13 B14 B17 B18 B19	C3 C6 C7 C8

Contents	
Topic	**Sub-topic**
ANALYSIS ON ARCHITECTURAL FORMS THROUGH FREEHAND DRAWING	Laws of visual perception and rules of proportion. Theories of form and image. Aesthetic theories of color. Analysis and description of architectural forms and spaces from significant examples of current or historical architecture. Human figures as reference of scale. Method of study, analysis and representation of architectural and urban forms. Freehand drawing and life scketching Employment and management of different techniques.
SKETCHING AND GRAPHIC SURVEY	Sketching and freehand drawing techniques Sketches and life drawing. Measurement techniques and graphic survey
CREATIVE DRAWING AND IDEATION SKETCHES	Creative graphic depiction as the aim of learning approach. Techniques for architectural design presentation. Composite drawing

Planning				
Methodologies / tests	**Competencies / Results**	**Teaching hours (in-person & virtual)**	**Student?s personal work hours**	**Total hours**
Workshop	A10 A13 A37 A39 B1 B3 B4 B7 B8 B9	28	54	82
Workshop	A10 A13 A37 A39 B3 B4 B7 B8	14	36	50
Objective test	A10 A13 A37 A39	6	0	6
Guest lecture / keynote speech	A10 A13 A37 A39 B3 B4 B7 B8 B9 B10 B11 B13 B14 B17 B18 B19 C3 C6 C7 C8	11	0	11
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	SUBJECT WORKSHOP. In this workshop practical lessons (28 hours) ?non included in the second term workshop? and all the previously proposed work the student must develop in the stipulated time (54 hours) for this supervised methodology must be taken into account. The total stipulated time should guaranteed a graphic volume previously determined by the professor.
Workshop	SECOND TERM WORKSHOP. Shared among the different subjects of Analysis on Architectural Forms and Projects 2. One or several in group essays will be proposed to be developed by the students outside the classroom. Lessons concerning this methodology in the classroom will be dedicated to the planning of the essays, to a series of theoretical lessons and to the supervised control of the proposed work. This methodology is meant to the learningship of ?how things must be done? focused on specific supervised essays to promote the students autonomous learningship.
Objective test	A practical examination used to the evaluation of the learningship whose distinctive aspect is the possibility to determine whether the acquired learningship is the expected to pass the examination. It is a measure instrument, rigorously elaborated which allows to evaluate the capacities, abilities and attitudes. It will consist of 2-4 drawings (6 hours), as the examination official timetable will establish.
Guest lecture / keynote speech	Oral exposition complemented by audio-visual means and some other resources, to transmit knowledge and facilitate learningship. Subject theoretical contents (combined in three major general themes) will be exposed in a non-lineal way, as the teacher should estimate to obtain the preview results and concerning the group heterogeneity.

Personalized attention	
Methodologies	**Description**
Workshop Workshop	This academic activity will be developed by the professor, either individual or in small group and its finality is to have into consideration the student´s needs and doubts in relation with the current essays, helping and motivating them during the learning process. For this subject and the already exposed methodologies it is fundamental to consult the professor about the weekly improvement to assure the quality of the essays according to the criteria which will be indicated in each case. Considering the importance the personalized care this subject has, this tutorial is compulsory for the students. Non assistance to the arranged tutorials (1h), the students will be given a ?non evaluated?.

Assessment			
Methodologies	**Competencies / Results**	**Description**	**Qualification**
Guest lecture / keynote speech	A10 A13 A37 A39 B3 B4 B7 B8 B9 B10 B11 B13 B14 B17 B18 B19 C3 C6 C7 C8	A minimun of 80% of assistence to lessons is compulsory for all students.	1
Workshop	A10 A13 A37 A39 B1 B3 B4 B7 B8 B9	SUBJECT WORKSHOP: 30% of the qualifications. In this workshop, two different kind of essays will be developed: 1) Drawings made in the classroom. This essays will be proposed by the professors and will be used to control both the evaluation of the students and reference of the essays made outside the classroom by the students. 2) Drawings made by the students outside the classrooms will consist of free drawings though teachers will be able to propose a specific essay weekly. This essay will be the fundamental object of the tutorial. Both kind of essays will be evaluated continuously.	30

Workshop	A10 A13 A37 A39 B3 B4 B7 B8	SECOND TERM WORKSHOP: 20% of the qualification. Tutored essays which evaluation will be made together with the two subjects that share the workshop. The final qualification will be the two subjects average qualification. This workshop is compulsory for all the students, even for those who had passed some of the two subjects previously.	19
Objective test	A10 A13 A37 A39	OBJECTIVE ASSESSMENT: 50% of the qualification. This methodology is meant to determine whether the student improvement has been sufficient and in concordance with what has been done in the workshops. It will be divided into two parts, three hours each, where the essays proposed by the professors will be developed. Students must obtain five points over ten in this methodology in order to pass this subject.	50

Assessment comments
To pass this subject, in any of the two evaluations within the course (the one belonging to the term or in the second opportunity in July) is an essential requirement to have done all the proposed essays in the different methodologies with the minimum established level and the correct professor tutorial. Otherwise the student will be consider non evaluated. Students who only attend the second opportunity in July will be specially obligated to fulfill what has been exposed above. A minimum of 80% of assistance is compulsory to pass the subject, otherwise students will be non evaluated. Considering the importance the personalized care this subject has, this tutorial is compulsory for the students. Non assistance to the arranged tutorials (1h), the students will be given a ?non evaluated?.

Sources of information	
Basic	- Martin, Judy (1994). APRENDER A ABOCETAR. Barcelona, Ed. Blume - Moneo, R. y Cortés, J. (1982). COMENTARIO SOBRE 20 ARQUITECTOS DEL SIGLO XX.. Barcelona. Ed. U. Politecnica Cataluña - Cramer, Johannes (). CONSTRUCCIÓN. LEVANTAMIENTO TOPOGRAFICO EN LA CONSTRUCCIÓN. . Barcelona, Ed. G.G. - Mills, Criss B. (2000). DESIGNING WITH MODELS. . Nueva York. Ed. John Wiley & Sons - Redondo, E. y Delgado, M. (). DIBUJO A MANO ALZADA PARA ARQUITECTOS. . Barcelona. Ed. Parramón - Uddin, M.S. (2000). DIBUJO AXONOMÉTRICO. . México. Ed. McGraw Hill - Uddin, M.S. (2000). DIBUJO DE COMPOSICIÓN. . México. Ed. McGraw Hill - Ching, Francis (1999). DIBUJO Y PROYECTO. . México. Ed. G.G. México - Cooper, Douglas (1992). DRAWING AND PERCEIVING. . Nueva York. Ed. Van Nostrand Reinhold - Ching, Francis (1982). MANUAL DE DIBUJO ARQUITECTONICO. . México. Ed. G.G. México - Porter y Goodman (1983-84-85). MANUAL DE TÉCNICAS GRÁFICAS PARA ARQUITECTOS. VOL 1,2,3 Y 4.. Barcelona. Ed. G.G. - Knoll, W. y Hechinger, M. (1982). MAQUETAS DE ARQUITECTURA: TECNICAS Y CONSTRUCCIÓN. . México. Ed. G.G. México - De Grandis, Luigina (1985). TEORIA Y USO DEL COLOR. . Madrid, Ed. Cátedra - Nikolaides, Kimon (). THE NATURAL WAY TO DRAW. . Boston, Ed. Houghton Mifflin
Complementary	

Recommendations
Subjects that it is recommended to have taken before

Architectural Projects 1/630G01001 Architectural Drawing/630G01002 Descriptive Geometry/630G01003
Subjects that are recommended to be taken simultaneously
Architectural Projects 2/630G01006
Subjects that continue the syllabus
Proxectos 3/630G01011 Análise Arquitectónico 1/630G01012 Xeometría da Forma Arquitectónica/630G01014
Other comments
It would be advisable for new students before joining this subject, that previously had completed courses in high school on technical and freehand drawing.