



| Teaching Guide      |  |        |   |         |
|---------------------|--|--------|---|---------|
| Identifying Data    |  |        |   | 2022/23 |
| Subject (*)         | Drawing in Architecture  | Code   | 630G02002   |         |
| Study programme     | Grao en Estudos de Arquitectura  |        |   |         |
| Descriptors         |  |        |   |         |
| Cycle               | Period   | Year   | Type  | Credits |
| Graduate            | 1st four-month period  | First  | Basic training  | 6       |
| Language            | SpanishEnglish   |        |   |         |
| Teaching method     | Face-to-face   |        |   |         |
| Prerequisites       |  |        |   |         |
| Department          | Expresión Gráfica Arquitectónica   |        |   |         |
| Coordinador         | Fraga Lopez, Francisco Javier  | E-mail | javier.fraga@udc.es   |         |
| Lecturers           | Caridad Yañez, Eduardo<br>Fernandez-Gago Longueira, Paula<br>Fraga Lopez, Fernando<br>Fraga Lopez, Francisco Javier<br>Mantiñan Campos, Carlos   | E-mail | eduardo.caridad@udc.es<br>paula.fernandez-gago@udc.es<br>fernando.fraga@udc.es<br>javier.fraga@udc.es<br>carlos.mantinan@udc.es |         |
| Web                 | <a href="https://campusvirtual.udc.gal/login/index.php">https://campusvirtual.udc.gal/login/index.php</a>  |        |   |         |
| General description | The aim of this course is that the student begins to acquire the necessary and sufficient graphic skills to face the design and project challenges that will arise from the first year in the degree. The correct evolution in the performance of this graphic ability is considered very important for the future development of your professional activity. These capacities / abilities refer, as established in the current Study Plan, to Freehand Drawing and the introduction to Architectural Drawing. |        |   |         |

| 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   |
| A5                          | "Knowledge of the metric and projective geometry 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  |
| 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 |
| 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                          | Adequate oral and written expression in the official languages.   |
| C2                          | Mastering oral and written expression in a foreign language.  |
| 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 |                                   |  |
| Ability to apply graphic representation systems. Ability to handle the quantitative and selective aspects of the scale. Ability to establish the relationship between plane and depth. Ability to analyze complex shapes. Ability to represent forms using PERSPECTIVE systems. Ability to study PROPORTIONS. Ability to apply GRAPHIC RESOURCES using different techniques   | A1<br>A2<br>A4              | B1<br>B4<br>B5<br>B6<br>B7<br>B12 | C1<br>C2<br>C3<br>C4<br>C5<br>C6<br>C7<br>C8 |
| Ability to conceive and represent the figure, color, texture, luminosity and master the proportion of objects. Knowledge and understanding of drawing techniques, including computer techniques, all of which are essential for the correct approach to design skills, a prelude to the representation of the architectural project. Detailed study of the stages or levels of graphic learning, from the initial perceptual stage to the final stage of creative representation. | A2                          | B1<br>B4<br>B5<br>B6<br>B7<br>B12 | C1<br>C2<br>C3<br>C4<br>C5<br>C6<br>C7<br>C8 |
| Knowledge and understanding of pictorial systems and their relationship with the procedures of graphic ideation and visual expression of the different phases of architectural and urban design.  | A3                          | B1<br>B4<br>B5<br>B6<br>B7<br>B12 | C1<br>C2<br>C3<br>C4<br>C5<br>C6<br>C7<br>C8 |
| Knowledge and understanding of the laws of visual perception and of proportion, theories of form and image, aesthetic theories of color and the procedures for the phenomenological and analytical study of architectural and urban forms.  | A4                          | B1<br>B4<br>B5<br>B6<br>B7<br>B12 | C1<br>C2<br>C3<br>C4<br>C5<br>C6<br>C7<br>C8 |
| Knowledge and understanding of metric and projective geometry as foundations of architectural layout, design and composition.   | A5                          | B1<br>B4<br>B5<br>B6<br>B7<br>B12 | C1<br>C2<br>C3<br>C4<br>C5<br>C6<br>C7<br>C8 |



|  |     |                                   |  |
|--|-----|-----------------------------------|--|
| Aptitude to apply the knowledge and capacities related to the Pictorial Systems, Spatial Representation, Graphic Ideation and Analysis of Forms in the development, presentation and defense before a University Court of an original academic work carried out individually and related to any of the subjects studied. | A63 | B1<br>B4<br>B5<br>B6<br>B7<br>B12 | C1<br>C2<br>C3<br>C4<br>C5<br>C6<br>C7<br>C8 |
|--|-----|-----------------------------------|--|

| Contents                              |   |
|---------------------------------------|---|
| Topic                                 | Sub-topic   |
| FREEHAND DRAWING                      | <p>Graphic learning methodologies applied to architectural representation.</p> <p>Expressive representation as the first phase of graphic learning.</p> <p>Sensitive drawing and rigorous drawing.</p> <p>Linear perspective applied to freehand drawing.</p> <p>Expressive volumetric representations: axonometries, perspective ...</p> |
| INTRODUCTION TO ARCHITECTURAL DRAWING | <p>Architectural representation.</p> <p>Scale / proportion.</p> <p>Graphic conventions.</p> <p>Composition and hand lettering.</p>  |

| Planning                       |  |                      |                               |             |
|--------------------------------|--|----------------------|-------------------------------|-------------|
| Methodologies / tests          | Competencies   | Ordinary class hours | Student?s personal work hours | Total hours |
| Introductory activities        | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | 2                    | 0                             | 2           |
| Guest lecture / keynote speech | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | 13                   | 0                             | 13          |
| Workshop                       | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | 40                   | 90                            | 130         |
| Objective test                 | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | 4                    | 0                             | 4           |



|   |  |   |   |   |
|---|--|---|---|---|
| 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   |
| Introductory activities        | These activities are intended to guide the student in the contents, the methodologies, the learning results of this subject and how he/she will be evaluated for its improvement.   |
| Guest lecture / keynote speech | Although according to the Annual Teaching Plan, there is an hour of independent theoretical session assigned in this subject (due to an administrative and homogenizing issue of the UDC during the implementation of the plans adapted to Bologna), the theoretical contents have always been included within the practice as they prove, multiple evidences and communications in teaching innovation conferences. The contents of the subject will be exposed in a non-linear way, in the sequence that the professors deem most appropriate to obtain the expected results and depending on the heterogeneity of the group. In general, the sessions will be theoretical-practical and will be carried out through oral presentations, complemented with the use of audiovisual media and other resources whose purpose is to transmit knowledge and facilitate learning.   |
| Workshop                       | <p>The workshop is the main nucleus of the teaching for this subject.</p> <p>This methodology refers primarily to learning &amp;quot;how to do things&amp;quot; and is focused on promoting the autonomous learning of students, under the tutelage of professors.</p> <p>This workshop includes both the face-to-face practical classes and the keynote speech sessions (see their corresponding section) as well as all the work proposed by the professors and that the student must develop in the non-contact time provided for this methodology.</p> <p>The total time foreseen for the subject will give rise to a volume of graphic work, which will be previously determined by the teaching staff and which will be mandatory. In general, all the workshop sessions will be theoretical-practical.</p> <p>The workshop refers to the two parts of the subject specified in the Study Plan: the one referring to freehand drawing and the one referring to architectural drawing.</p> |
| Objective test                 | The objective tests are the set of compulsory exercises that the student must perform both on the dates established by the official calendar and on those other dates indicated by the teaching staff within the workshop.  |

| Personalized attention  |   |
|---|---|
| Methodologies   | Description   |
| Objective test<br>Introductory activities<br>Guest lecture / keynote speech<br>Workshop | <p>The tutorials are intended to meet the needs and queries of the students related to the work to be done in the subject, providing guidance, support and motivation in the learning process.</p> <p>In this subject, it is understood as essential to consult with the teacher the progress that is being made, progressively, so that the necessary guidelines can be offered to ensure the quality of the work according to the criteria that will be indicated in each case.</p> <p>Given the importance of personalized attention for this subject, this will always be carried out by appointment to guarantee both compliance and temporary provision and avoid unnecessary waiting for students.</p> <p>This academic activity will be developed by the teaching staff, individually or in a small group, and may be face-to-face or virtual by Teams at the choice of each professor.</p> |

| Assessment    |              |             |               |
|---------------|--------------|-------------|---------------|
| Methodologies | Competencies | Description | Qualification |



|                                |  |  |    |
|--------------------------------|--|--|----|
| Objective test                 | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | A final OBJECTIVE TEST will be carried out in which a minimum grade of 5 is required in each of the two parts of the subject.  | 40 |
| Guest lecture / keynote speech | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | As it was already explained, the theory of this subject is focused on its practice. That is why, although this item appears in the evaluation section, it is not evaluated independently and, therefore, does not count in the evaluation.   | 0  |
| Workshop                       | A1 A2 A3 A4 A5 A63<br>B1 B4 B5 B6 B7 B12<br>C1 C2 C3 C4 C5 C6<br>C7 C8 | <p>By virtue of the adaptation measures stipulated in the Instructions of July 1, 2021 of the General Secretariat of Universities, a continuous evaluation system is used for the final assessment of the WORKSHOP.</p> <p>The weight of each assignment to be carried out for each of the two parts of the subject, will be set at the beginning of the semester by the teaching staff.</p> <p>To pass the workshop it is necessary to get a pass in each of its two parts.</p> <p>The workshop grade will be obtained by applying the criteria set out in the presentation of the semester by the professors of each group, assessing in a weighted way the final graphic level reached by the students in each of the two parts</p> | 60 |

#### Assessment comments



## 1. Attendance:

? Attendance is mandatory. An attendance below 80% will mean that the student is considered an absent. The 20% of absences is the percentage that covers the imponderables that we can consider as habitual.

? Students with recognition of part-time dedication will be exempt from this obligation. However, these students must comply with everything related to the delivery of assignments and tutorials.

## 2. Deliveries of assignments:

? Except for a duly justified cause in accordance with current regulations, the failure to deliver a work on the date established for it, will imply the qualification of absent.

? All the works and drawings made in the workshop will be collected on the dates indicated in the calendar of the subject that is proposed on the day of the presentation. All deliveries cannot be postponed and any change must be agreed between the students and the teaching staff.

? Students with recognition of part-time dedication or specific modalities of learning and support for diversity, must submit their work on time. If the foregoing is impossible, and with prior justification, you must previously agree with the teaching staff a new date for the delivery or for the performance of the control or examination exercise, if applicable.

? To pass the course, in any of the two official opportunities of the course it is an essential requirement to have carried out all the proposed work with the minimum level of documentation and minimum content established level and the adequate supervision of the teacher. Otherwise the student will be considered absent (no-show).

? The monitoring of the proposed assignments will only be considered effective if the professor has had proof of the performance of the students in the exercises carried out during the face-to-face time of the subject and if said performance is consistent with the work done during the non-face time.

## 3. Second chance of July:

? Students who have not passed the course on the first opportunity are obliged to present, in order to be evaluated on the second opportunity, all the works and / or drawings that they have not delivered on the first opportunity.

? In addition, the professors may demand the completion of new proposed assignments at the beginning of the second semester. The purpose of these works is that students can develop them, and can be effectively tutored, throughout the 2nd semester. These assignments will be delivered on the day of the second chance exam.

? Students who appear only on the second opportunity in July will be especially obliged to carry out all the work requested during the course and specially to comply with the supervision of the proposed works.

## 4. Personalized attention:

? Given the importance of personalized attention for this subject, this will always be done by requesting an appointment by email, with the aim of optimizing your organization. This academic activity will be developed by the teaching staff, individually or in a small group, and may be face-to-face or virtual (by Teams) at the choice of each professor. This will also apply to students with recognition of part-time dedication.

## 5. Students of mobility programs

? Teaching to students of mobility programs will be adapted by adjusting the conditions of the work proposed for the rest of the students. According to the professor's opinion, the evaluation tests and exams will also be adapted for these students, if necessary.



|                      |  |
|----------------------|--|
| <b>Basic</b>         | <ul style="list-style-type: none"> <li>- Campanario, Gabriel (2012). THE ART OF THE URBAN SKETCHING. Massacusetts. Ed. Quarry Books</li> <li>- Cooper, Douglas (1992). DRAWING AND PERCEIVING. Nueva York. Ed. John Wiley &amp; Sons</li> <li>- Ching, Francis (1982). MANUAL DE DIBUJO ARQUITECTÓNICO. México. Ed. G.G. México</li> <li>- Ching, Francis (1990). DRAWING. A CREATIVE PROCESS. New York. Ed. Wiley and Son</li> <li>- Ching, Francis (1999). DIBUJO Y PROYECTO. México. Ed. G.G. México</li> <li>- Edwards, Betty (1979). APRENDER A DIBUJAR CON EL LADO DERECHO DEL CEREBRO. Nueva York. Ed. Urano</li> <li>- Jacoby, Helmut (1973). NUEVOS DIBUJOS DE ARQUITECTURA. Barcelona. Ed. G.G.</li> <li>- Moneo, R. y Cortés, J. (1982). COMENTARIO SOBRE 20 ARQUITECTOS DEL SIGLO XX. Barcelona. Ed. U. Politecnica Cataluña</li> <li>- Nicolaidis, Kimon (1990). The Natural Way to Draw: A Working Plan for Art Study. Harcourt Brace and Company</li> <li>- Porter y Goodman (1983-1984-1985). MANUAL DE TÉCNICAS GRÁFICAS PARA ARQUITECTOS. VOL 1,2,3 Y 4. Barcelona. Ed. G.G.</li> <li>- Redondo, E. y Delgado, M. (). DIBUJO A MANO ALZADA PARA ARQUITECTOS.. Barcelona. Ed. Parramón</li> <li>- Richards, James (2013). FREEHAND DRAWING AND DISCOVERY. New Jersey. Ed. Wiley and Son</li> <li>- Uddin, M.S. (2000). DIBUJO AXONOMÉTRICO. México. Ed. McGraw Hill</li> <li>- Uddin, M.S. (2000). DIBUJO DE COMPOSICIÓN. México. Ed. McGraw Hill</li> <li>- VanDyke, Scott (1984). DE LA LINEA AL DISEÑO. México. Ed. G.G. México</li> <li>- Dodson, Bert (2007). KEYS TO DRAWING WITH IMAGINATION. Cincinatti, Ohio. Ed. North Light Books</li> <li>- Dodson, Bert (1985). KEYS TO DRAWING . Cincinatti, Ohio. Ed. North Light Books</li> </ul> <p>&lt;br /&gt;</p> |
| <b>Complementary</b> |  |

### Recommendations

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

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

Descriptive Geometry/630G02003

Introduction to Architecture/630G02005

#### Subjects that continue the syllabus

Analysis of Architectural Forms/630G02007

#### Other comments

It would be advisable for new students before joining this subject, that previously had completed courses in high school on graphic representation and freehand drawing.

(\*)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.