UNIVERSIDAD DE CASTILLA - LA MANCHA

GUÍA DOCENTE

1. General information

Course: ARTWORK I
Type: BASIC
Degree: 315 - UNDERGRADUATE DEGREE IN BUILDING ENGINEERING
Center: 308 - SCHOOL POLYTECHNIC OF CUENCA
Year: 2
Main language: Spanish
Use of additional languages:
Web site:

Code: 59311
ECTS credits: 6
Academic year: 2021-22
Group(s): 30
Duration: First semester
Second language:
English Friendly: N
Bilingual: N

Lecturer: **VICTOR JOSE PEREZ ANDREU** - Group(s): **30**

Building/Office	Department	Phone number	Email	Office hours
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Lecturer: **JOSE LUIS SERRANO CANTO** - Group(s): **30**

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2. Pre-Requisites

Recommended to have passed the first year courses.

3. Justification in the curriculum, relation to other subjects and to the profession

RELATIONSHIP WITH THE PROFESSION

The object of the subject is the learning of architectural technical drawing, being a fundamental means of communication between the different agents involved in the building processes. The subject corresponds to the learning of the technical graphic language that allows to communicate and document, in an efficient way, the spatial, geometric, dimensional and functional characteristics of the architectural and constructive elements that make up the buildings. The ability to interpret and generate architectural technical drawings is essential in the training and professional practice of building engineers.

The subject trains the student to take geometric, dimensional and material data of architectural constructions for documentation. To do this, "in situ" surveys of buildings are made by drawing a freehand sketch, using photography and measuring methods. With the information obtained, the corresponding architectural models are defined and the drawings, plans and necessary information are obtained.

RELATIONSHIP WITH OTHER SUBJECTS OF THE STUDY PLAN

The learning of the subject requires the ability of visualization and spatial representation that develops in the subject in the first year.

Drawing I provides the student with the necessary skills to express and document the studies and geometrical, spatial and dimensional analysis of buildings, which are necessary for the learning of later subjects in the curriculum. This subject completes the basic training of the subject Graphic Expression, foreseen in the plan, and is complemented in a specific way with the learning of Drawing II, Topography, Technical Projects and Advanced Drawing, during later courses.

4. Degree competences achieved in this course

Course competences

Code	Description
E03	Ability to apply the spatial representation systems, the sketch development, proportionality, language and graphical representation techniques of the elements and constructive processes.
G01	Ability for analysis and synthesis
G03	Ability to manage information
G04	Problem resolution
G05	Decision making
G07	Teamwork
G12	Autonomous learning
G19	Motivation for quality
G22	Correct oral and written communication

5. Objectives or Learning Outcomes

Course learning outcomes

Description

Know and know how to use the direct graphic techniques or autographs used in the productions of the graphic representation of architectural application.
Know and know how to use the different modes of presentation that characterize each of the graphical languages ¿¿of architectural application.

Additional outcomes

Train in the use of integrated information technology in BIM contexts for the production and management of digital information models and architectural graphic documentation.

Use basic tools for the documentation and measurement of the dimensions of buildings and building elements.

6. Units / Contents

Unit 1: DRAWING AND ARCHITECTURAL MODELING

- **Unit 1.1** Graphic documentation of the building processes.
- **Unit 1.2** Architectural representation by manual means and autographs
- **Unit 1.3** Digital architectural modeling
- **Unit 1.4** Drawing architectural plans.

Unit 2: GRAPHIC DOCUMENTATION OF EXISTING BUILDINGS

- **Unit 2.1** Study, representation and techniques for existing buildings documentation
- **Unit 2.2** Freehand architectural drawing: techniques and purposes
- **Unit 2.3** Architectural modeling
- **Unit 2.4**

Unit 3: ARCHITECTURAL DOCUMENTATION WORKSHOP

- **Unit 3.1** Data collection of existing building
- **Unit 3.2** Realization of BIM architectural model
- **Unit 3.3** Configuration and layout of technical drawings of an architectural model
- **Unit 3.4** Architectural presentation of existing building

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures	G01 G03 G22	0.36	9	N	-	
Class Attendance (practical) [ON-SITE]	Problem solving and exercises	G01 G03 G04 G05	0.6	15	Y	N	
Other on-site activities [ON-SITE]	Project/Problem Based Learning (PBL)	G01 G03 G04 G05 G07 G12 G19 G22	0.96	24	Y	Y	
Group tutoring sessions [ON-SITE]	Group tutoring sessions	G01 G03 G04 G05 G07 G12 G19 G22	0.24	6	N	-	
Final test [ON-SITE]	Assessment tests	E03 G01 G03 G04 G05 G12 G19 G22	0.24	6	Y	Y	
Study and Exam Preparation [OFF-SITE]	Self-study	G01 G03 G12 G19 G22	1	25	N	-	
Writing of reports or projects [OFF-SITE]	Problem solving and exercises	G01 G03 G04 G05 G07 G12 G19 G22	2.6	65	Y	N	
		Total:	**6**	**150**			
		Total credits of in-class work: 2.4					**Total class time hours: 60**
		Total credits of out of class work: 3.6					**Total hours of out of class work: 90**

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Practicum and practical activities reports assessment	30.00%	30.00%	
Projects	40.00%	40.00%	
Final test	30.00%	30.00%	
Total:	**100.00%**	**100.00%**	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject , an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

The grade of the subject is calculated by means of the weighted sum of all the evaluable activities: resolution of exercises in class, tests, work and defense of the same.

Non-continuous evaluation:

The grade of the subject is calculated by means of the weighted sum of all the evaluable activities: resolution of exercises in class, tests, work and defense of the same.

Specifications for the resit/retake exam:

50% Completion of monographic work
10% Defense of work
20% Resolution of architectural sketch drawing exercises
20% Resolution of architectural computer aided drawing drawings

Specifications for the second resit / retake exam:

50% Completion of monographic work
10% Defense of work
20% Resolution of architectural sketch drawing exercises
20% Resolution of architectural computer aided drawing drawings

9. Assignments, course calendar and important dates

Not related to the syllabus/contents

Hours	hours

Unit 1 (de 3): DRAWING AND ARCHITECTURAL MODELING

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Problem solving and exercises]	5
Other on-site activities [PRESENCIAL][Project/Problem Based Learning (PBL)]	8
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	2
Final test [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Self-study]	8
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	20

Teaching period: 5 weeks

Unit 2 (de 3): GRAPHIC DOCUMENTATION OF EXISTING BUILDINGS

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Problem solving and exercises]	5
Other on-site activities [PRESENCIAL][Project/Problem Based Learning (PBL)]	8
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	2
Final test [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Self-study]	8
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	20

Teaching period: 5 weeks

Unit 3 (de 3): ARCHITECTURAL DOCUMENTATION WORKSHOP

Activities	Hours
Class Attendance (theory) [PRESENCIAL][Lectures]	3
Class Attendance (practical) [PRESENCIAL][Problem solving and exercises]	5
Other on-site activities [PRESENCIAL][Project/Problem Based Learning (PBL)]	8
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	2
Final test [PRESENCIAL][Assessment tests]	2
Study and Exam Preparation [AUTÓNOMA][Self-study]	9
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	25

Teaching period: 5 weeks

Global activity

Activities	hours
Class Attendance (practical) [PRESENCIAL][Problem solving and exercises]	15
Group tutoring sessions [PRESENCIAL][Group tutoring sessions]	6
Study and Exam Preparation [AUTÓNOMA][Self-study]	25
Other on-site activities [PRESENCIAL][Project/Problem Based Learning (PBL)]	24
Writing of reports or projects [AUTÓNOMA][Problem solving and exercises]	65
Class Attendance (theory) [PRESENCIAL][Lectures]	9
Final test [PRESENCIAL][Assessment tests]	6
Total horas:	150

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Ching, Francis D.K.	Manual de dibujo arquitectónico	Gustavo Gili		978-84-252-2021-0	2008	
Asociación Española de Normalización y Certificación	Dibujo técnico	Asociación Española de Normalización y Certific		84-8143-380-2	2004	
Llorens Corraliza, Santiago	Iniciación al croquis arquitectónico	UPM		84-600-7252-5	1995	
Molero Vera, Josep	AutoCAD 2010 : curso de iniciación	Infobook's		978-84-96897-64-9	2009	
Sainz Avia, Jorge	El dibujo de arquitectura : teoría e historia de un lenguaje	Reverté		978-84-291-2106-3	2009	
Sanders, Ken	El Arquitecto digital : guía para utilizar (con sentido com	Eunsa		84-313-1616-0	1998	
Autodesk	AUTODESK REVIT ARCHITECTURE FUNDAMENTALS	ASCENT		978-1-58503-803-9	2013	