

Course guide

290608 - DIBII14 - Technical Drawing

Last modified: 14/07/2024

Unit in charge: Vallès School of Architecture
Teaching unit: 752 - RA - Departamento de Representación Arquitectónica.
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Compulsory subject).
Academic year: 2024 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Crespo Cabillo, Isabel
Others: Marc Roca Mussach
Tornabell Teixidor, Josep
Àvila Casademont, Ginés
Bertomeu Farnós, Gerard

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

EP4G. The ability to conceive, execute and develop basic and detailed designs, sketches and drafts (T).
EP17G. Adequate knowledge of methods for studying symbolisation processes, practical functions and ergonomics.
EAB3G. Adequate knowledge of spatial representation systems applied to architecture and urbanism.
EAB6G. Adequate knowledge of graphic surveying techniques at all stages, from sketching to scientific restitution, applied to architecture and urbanism.

Generical:

CE1. An aptitude for creating architectural projects that meet both aesthetic and technical demands.
CE3. Knowledge of fine art as a factor that may influence the quality of architectural design.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

Introduction to computer tools for drawing. Technical drawing of architecture with expressive and communicative values, with manual and computer techniques: graphic narrative. Geometric shading and expressive treatment of shading. Contours and fillers, hierarchy, line values, hatched. Depth in the dihedral. Control of the plan, bounded system and terrain representation. Geometric knowledge of construction surfaces. Use the appropriate technical vocabulary. Use the conventions of the most usual graphics: format, titles, feet, legends. Know how to compile a graphic material in an organized document.

STUDY LOAD

Type	Hours	Percentage
Hours large group	9,9	6.60
Hours small group	56,1	37.40
Self study	84,0	56.00

Total learning time: 150 h

CONTENTS

Syllabus

Description:

Technical drawing, expressive and communicative architecture.
Limited knowledge of the system, control plane and terrain representation.
Control graph polyhedral geometry.
Tracing and treating shadows as a tool for reading and expression of form.
Technical drawing of architecture with expressive and communicative values ??with manual and computer techniques:
introduction to graphic narrative.

Full-or-part-time: 66h

Theory classes: 10h

Laboratory classes: 28h

Guided activities: 28h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Evans, Robin. Translations from drawing to building and other essays. London: Architectural Association, cop. 1997. ISBN 187089068X.
- Llinàs Carmona, Josep; Font Comas, Joan; Crespo, Isabel; Martínez Mindeguía, Francisco. Els Dibuixos de Josep Llinàs. [Sant Cugat del Vallès]: Centre d'Aplicacions Informàtiques a la representació de l'Arquitectura i el Territori CAIRAT : Escola Tècnica Superior d'Arquitectura del Vallès, DL 2004. ISBN 8460801489.
- Blau, Eve; Kaufman, Edward; Evans, Robin. Architecture and its image : four centuries of architectural representation : works from the collection of the Canada Centre for Architecture. Montreal: Centre Canadien d'Architecture/Canadian Centre of Architecture, 1989. ISBN 0262022893.
- Schmidt, Rudolf. Geometría descriptiva con figuras estereoscópicas. Barcelona: Reverté, 1983. ISBN 8429151354.
- Font Comas, Joan; Crespo, Isabel; Martínez Mindeguía, Francisco. El Dibuix i la imatge del projecte : l'obra gràfica de 4 equips d'arquitectes romans. Sant Cugat del Vallès: Centre d'Aplicacions Informàtiques a la representació de l'Arquitectura i el Territori CAIRAT : Escola Tècnica Superior d'Arquitectura del Vallès, DL 2006. ISBN 846080545X.
- Sáinz Avia, Jorge. El Dibujo de arquitectura : teoría e historia de un lenguaje gráfico. Madrid: Nerea, 1990. ISBN 8486763320.
- Llinàs Carmona, Josep; Font Comas, Joan; Crespo, Isabel; Martínez Mindeguía, Francisco. Els Dibuixos de Josep Llinàs. [Sant Cugat del Vallès]: Centre d'Aplicacions Informàtiques a la representació de l'Arquitectura i el Territori CAIRAT : Escola Tècnica Superior d'Arquitectura del Vallès, DL 2004. ISBN 8460801489.
- Gheorghiu, Adrian; Dragomir, Virgil. Geometry of structural forms. London [etc.]: Applied Science Publishers, cop. 1978. ISBN 0853346836.
- San José Alonso, Jesús Ignacio. El Dibujo arquitectónico : apuntes sobre su desarrollo. Valladolid: Secretariado de Publicaciones e Intercambio Científico, Universidad de Valladolid : Colegio Oficial de Arquitectos de Valladolid, 1997. ISBN 8477627614.
- Sánchez Gallego, Juan Antonio. Geometría descriptiva [Recurs electrònic] : sistemas de proyección cilíndrica [on line]. Barcelona: Edicions UPC, 1997 [Consultation: 29/11/2016]. Available on: <http://upcommons.upc.edu/bitstream/handle/2099.3/36345/9788498803815.pdf?sequence=4&isAllowed=y>. ISBN 9788498803815.
- Sánchez Gallego, Juan Antonio; Villanueva Bartrina, Lluís. Temes clau de dibuix tècnic. Barcelona: Universitat Politècnica de Catalunya, DL 1991. ISBN 8476531192.
- Robbins, Edward; Cullinan, Edward. Why architects draw. Cambridge: MIT Press, cop. 1994. ISBN 0262181576.
- Sáinz Avia, Jorge; Valderrama, Fernando. Infografía y arquitectura : dibujo y proyecto asistidos por ordenador. Madrid: Nerea, cop. 1992. ISBN 8486763681.
- Villanueva Bartrina, Lluís. Introducció al traçat d'ombres : representacions dièdrica i axonomètrica. Barcelona: Departament d'Expressió Gràfica Arquitectònica I. Escola Tècnica Superior d'Arquitectura de Barcelona. Universitat Politècnica de Catalunya, cop. 2001. ISBN 8495249111.