

Course guide

290623 - TAPV14 - Architecture and Design Workshop: Housing and Technique

Last modified: 06/02/2025

Unit in charge: Vallès School of Architecture
Teaching unit: 735 - PA - Department of Architectural Design.
753 - TA - Department of Architectural Technology.

Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Compulsory subject).

Academic year: 2024 **ECTS Credits:** 12.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: Salvadó Aragonès, Núria

Others: Tudo Gali, Roger
De Rivera Marinell-Lo, Inés
Godoy Muñoz, Alfonso De Jesús
Pratdesaba Fargas, Josep
Noya Martínez, Albert

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

EP4G. The ability to conceive, execute and develop basic and detailed designs, sketches and drafts (T).
EP1G. An aptitude for removing architectural barriers (T).
EP6G. The ability to design, practise and implement construction site management (T).
EP7G. The ability to design functional programmes for buildings and urban spaces (T).
ET1G. An aptitude for conceiving, calculating, designing and executing foundation solutions and integrating them into existing buildings and urban areas (T).
ET7G. The ability to conceive, calculate, design and implement systems for the division of interiors, carpentry, stairs and other finishing work and integrate them into existing buildings and urban areas (T).
ET6G. The ability to conceive, calculate, design and erect building structures and integrate them into existing buildings and urban areas (T).
EP17G. Adequate knowledge of methods for studying symbolisation processes, practical functions and ergonomics.
ET8G. The ability to conceive, calculate, design and erect enclosures, roofs and other structural work and integrate them into existing buildings and urban areas (T).
EP18G. Adequate knowledge of methods for studying social needs, quality of life, habitability and basic housing programmes.
EP20G. Adequate knowledge of architectural, urban planning and landscaping traditions in Western culture, as well as their technical, climatic, economic, social and ideological foundations.
EP22G. Adequate knowledge of the relationship between cultural patterns and the social responsibilities of architecture.
EP27G. Knowledge of feasibility analysis and the supervision and coordination of integrated projects.
ET9G. The ability to conceive, calculate, design and install water supply, sewage, heating and air conditioning systems and integrate them into existing buildings and urban areas (T).

Generical:

CE5. The ability to understand the relationship between people and buildings, and between buildings and their environment, and the necessity of relating buildings to the spaces between them in view of needs and human scale.
CE1. An aptitude for creating architectural projects that meet both aesthetic and technical demands.

TEACHING METHODOLOGY



LEARNING OBJECTIVES OF THE SUBJECT

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STUDY LOAD

Type	Hours	Percentage
Hours small group	112,0	37.33
Self study	168,0	56.00
Hours large group	20,0	6.67

Total learning time: 300 h

CONTENTS

Syllabus

Description:

The course deals exclusively with housing. It covers all the variables that influence the qualities of a dwelling, and those that arise when these qualities have to be achieved in a building which includes a number of flats. If in the first case we must address the needs -physical and psychological- of the users, in the second we must pay attention to the conditions -formal and technical- imposed by the repetition of units and the size of the building. The course maintains a double commitment: first, the utmost respect for the people, to all his needs and sensibilities; and on the other hand, a like respect for the environment, recognizing the importance that the architecture of housing has in the formal and functional definition of urban systems.

Specific objectives:

1. Comfort. Definition and conditions.
2. Housing and environment: architecture as elaboration of landscape.
3. The building as a system: integration of formal, functional and constructive qualities.
4. The house as a system of 'areas': the activities.
5. The house as itinerary: circulations.
6. Distribution or organization? The design of the spaces and the design of relationships.
7. Flexibility and adaptability: design for change.
8. Equipment and furniture: immediate forms.
9. The structure: the construction of lift
10. Envelopes and covers: building protection.
11. Service spaces and technical systems.

SPRING SEMESTER:

1. Understanding the building environment. Dealing with its urban context, formal composition (order), spaces and construction.
2. The housing unit. Comfort. Layout (spaces and relationships). Flexibility and adaptability.
3. Housing and environment: architecture as a landscape generator. The building as an active agent of the urban space.
4. The building as system. The unit aggregation system and its metabolism. Integration of formal, functional and constructive qualities. Circulation. Shared spaces and their relevance in collective life.
5. Substituting a building portion. Formal and compositional relationship with the existing. The facades. Constructive relationship between current and old systems and techniques.
6. The structure: constructing the support. Alterations and continuities with the existing.
7. Building envelope: Protection techniques. Alterations and continuities.
8. Technical services and systems. Formal integration into the building.

Full-or-part-time: 132h

Theory classes: 20h

Laboratory classes: 112h



GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Detall Estratègic.
- Arnold, Françoise. Le Logement collectif. Paris: Le Moniteur, cop. 1996. ISBN 2281190919.
- Canales, Fernanda. Mi casa, mi ciudad : privacidad en un mundo compartido. Barcelona: Puente editores, 2021. ISBN 9788412198164.

Complementary:

- Aureli, Pier Vittorio; Tattara, Martino. The Room of one's own : the architecture of the private room. Milano: Black Square Publishing, 2017. ISBN 9788894030662.
- Edwards, Brian; Turrent, David. Sustainable housing : principles & practice. London: E & FN Spon, 2000. ISBN 0419246207.
- García Navarro, Justo; Peña Pareja, Eduardo de la. El Cuarto de baño en la vivienda urbana : una perspectiva histórica. Madrid: Fundación Cultural COAM, [etc.], 1998. ISBN 8488496265.
- Monteys, Xavier; Fuertes, Pere. Casa collage : un ensayo sobre la arquitectura de la casa. Barcelona: Gustavo Gili, 2014. ISBN 9788425227820.
- Monteys, Xavier. La habitación : más allá de la sala de estar [on line]. Barcelona: Gustavo Gili, 2014 [Consultation: 28/10/2022]. Available on : <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=3228283>. ISBN 9788425227394.
- Fernández Per, Aurora.; Mozas, Javier.; Ollero, Álex S.; A+T Research Group. 10 historias sobre vivienda colectiva : análisis gráfico de diez obras esenciales. Vitoria-Gasteiz: A+T Architecture Publishers, 2013. ISBN 9788461598830.
- Ábalos, Iñaki; Blanco, Sofía; Armida, Fernández; Andrés, Jose de. Palacios comunales atemporales : genealogía y anatomía. Barcelona: Puente Editores, 2020. ISBN 9788412198119.
- Boudet, Dominique. New housing in Zurich : typologies for a changing society. Zurich: Park Books, 2017. ISBN 9783038600428.
- Paricio, Ignacio; Sust, Xavier. La vivienda contemporánea : programa y tecnología. Barcelona: ITEC, 1998. ISBN 8478533397.
- Revista A+T núm. 41. Reclaim : domestic actions I [on line]. Vitoria-Gasteiz: A+T Ediciones, 2013 [Consultation: 28/10/2022]. Available on: https://aplust-net.recursos.biblioteca.upc.edu/full/a-t-41_RECLAIM-Domestic-Actions-Digital/#page=1.- Revista A+T núm. 42. Reclaim : domestic actions II [on line]. Vitoria-Gasteiz: A+T Ediciones, 2013 [Consultation: 28/10/2022]. Available on: https://aplust-net.recursos.biblioteca.upc.edu/full/a-t-42_RECLAIM-Domestic-Actions-2_Digital/.- Druot, Frédéric; Lacaton, Anne; Vassal, Jean-Philippe. Plus : la vivienda colectiva : territorio de excepción = les grands ensembles de logements : territoire d'exception = large-scale housing developments : an exceptional case [on line]. Barcelona: Gustavo Gili, 2007 [Consultation: 22/03/2023]. Available on: <https://elibro.net/es/ereader/upcatalunya/45530>. ISBN 9788425226540.
- Aureli, Pier Vittorio; Tattara, Martino. Loveless : the minimum dwelling and its discontents. Milano: Black Square Publishing, 2019. ISBN 9788894030679.