

BASIC DETAILS:

Subject:	CULTURA Y TEORÍA EN ARQUITECTURA V		
Id.:	30230		
Programme:	GRADUADO EN ARQUITECTURA. PLAN 2009 (BOE 21/03/2015)		
Module:	PROYECTUAL		
Subject type:	OBLIGATORIA		
Year:	4	Teaching period:	Primer Cuatrimestre
Credits:	3	Total hours:	75
Classroom activities:	32	Individual study:	43
Main teaching language:	Inglés	Secondary teaching language:	Castellano
Lecturer:		Email:	

PRESENTATION:

The subject of the course constitutes an overview of the XXth century history of architecture characterized by a radical approach based on form and function, breaking with the classical tradition to advance a new modern language focused on industry and abstraction. Prominent figures appeared during this period as Wright, Le Corbusier, Mies, Aalto and Kahn launching a distinct view of architecture as the interaction of art, nature, technology and construction.

Their legacy constitutes the foundation of contemporary architecture where new stars as Foster, Piano, Eisenman, Ghery, Hadid, Koolhaas, H&M and SANAA enlighten the legacy of the modern masters updating their ideas and principles to the present time.

PROFESSIONAL COMPETENCES ACQUIRED IN THE SUBJECT:

General programme competences	G01	Effectively use language skills to express views and formulate arguments both orally and in writing Ability to express opinions and propose arguments effectively both orally and in writing in student's native language and English.
	G02	Ability to resolve problems and make decisions throughout their lifetime and choose professional and educational pathways independently.
	G03	Ability for autonomous learning and self-criticism.
	G04	Ability to transfer the knowledge acquired in practical work and skills to the field of work.
	G05	Demonstrate creativity, independence of thought, autonomy.
	G06	Demonstrate critical and analytical ability to conventional approaches of the discipline.
	G07	Demonstrate capacity for innovation, creativity and initiative.
	G08	Incorporate social and humanistic knowledge to an all-encompassing university education.
	G09	Capacity of developing values such as solidarity, multiculturalism, equality, social commitment, respect, diversity, integrity, universal accessibility, among other values that are unique to a culture of peace and democratic values.
	G10	Formulate proposals for social transformation from a critical and constructive point of view.
	G11	Ability to act, make decisions and take initiatives based on their own convictions and ethical behaviour.
	G12	Knowledge of culture and society as a pillar of human reality.
	G13	Knowledge of ethical commitment that leads to respect for the dignity of persons.
	G14	Knowledge of the methods and procedures of democratic societies in the defence of fundamental rights of the person.
Specific programme competences	E01	Ability to: Apply the graphic procedures to the representation of spaces and objects (T); Design and represent the visual attributes of objects and master proportion and drawing techniques, including computer-based techniques (T).
	E02	Knowledge adapted and applied to architecture and urbanism of: The spatial representation systems; Analysis and theory of form and laws of visual perception; The metric and projective geometry; Graphic survey techniques in all its phases, from drawing notes to scientific restitution. The principles of general mechanics, statics, the geometry of masses and vector and tensor fields; The principles of thermodynamics, acoustics and optics; The principles of fluid, hydraulics, electricity and electromagnetism mechanics; the basis of topography and mapping and terrain modification techniques.
	E03	Knowledge applied to: Numeracy, analytical and differential geometry and algebraic methods.
	E04	Ability to conceive, calculate, design, integrate into buildings and urban units and execute: Building structures (T); Interior division systems, carpentry, stairways and other finished work (T); Locking systems, roof and other structural work (T); Foundation Solutions (T); Supply facilities, water treatment and disposal, heating and air conditioning (T).

	E05	Ability to: Apply technical and construction standards; Maintain building structures, foundation and civil works; Conserve the finished work; Evaluate the project.
	E06	Capacity to Preserve the structural work; Plan building and urban transformation facilities and power supply, audiovisual communication, acoustic conditioning and artificial lighting; Conserve facilities.
	E07	Adequate knowledge of: Solid mechanics of continuous media and soil, as well as plastic, elastic and strength of materials of heavy works; Conventional building systems and their pathology; The physical and chemical characteristics, production procedures, pathology and use of building materials; Industrialised building systems.
	E08	Knowledge of: Ethics, collegiate organisations, professional structure and civil liability; Administrative and professional management procedures; The organisation of professional offices; Measurement, expert and assessment methods; Health and safety at work; The management and real estate management.
	E09	Suitability for design, practice and development of: Basic execution projects, sketches and drafts (T); Urban Projects (T); Construction management (T).
	E10	Ability to: Develop functional programmes of buildings and urban spaces; Intervene in and conserve, restore and rehabilitate the built heritage (T); Remove architectural barriers (T); Undertake architectural criticism; Solve the passive environmental conditioning, including thermal and acoustic insulation, climate control, energy efficiency and natural lighting (T); Catalogue built and urban heritage and plan its protection.
	E11	Capacity to Perform safety projects, evacuation and protection properties (T); Compose civil engineering projects (T); Design and execute urban layouts and development projects, gardening and landscape (T); Apply standards and building regulations; Develop environmental, landscape and correction of environmental impacts studies(T).
	E12	Adequate knowledge of: General theories of form, composition and architectural types; The general history of architecture; The methods of studying the processes of symbolisation, practical functions and ergonomics; The methods to study social needs, quality of life, habitability and basic housing programmes; Ecology, sustainability and the principles of conservation of energy and environmental resources; Architectural, urban and landscape traditions of Western culture, as well as their technical, climatic, economic, social and ideological foundations; Aesthetics and theory and history of fine arts and applied arts; The relationship between cultural patterns and social responsibilities of the architect; The bases of vernacular architecture; Sociology, theory, economics and urban history; The methodological foundations of urban planning and territorial and metropolitan management; Drafting mechanisms and management of urban plans at any scale.
	E13	Knowledge of: Civil, administrative, urban laws of the building industry and the professional performance; Feasibility analysis and supervision and coordination of integrated projects; The real estate appraisal.
	E14	Once all the credits of the curriculum are obtained, the presentation and defence of an original project individually, before a university tribunal which will include at least one member suggested by the professional organisations. The assignment will consist of a comprehensive architectural project of a professional nature in which all the skills acquired in the degree are put into practice to the point of demonstrating proficiency to determine the complete execution of the construction project, in compliance with the applicable technical and administrative regulations.
Regulated profession competences	P01	Ability to create architectural designs that satisfy both aesthetic and technical requirements.
	P02	Adequate knowledge of the history and theories of architecture as well as the arts, technology and human sciences.
	P03	Knowledge of the fine arts as an influence on the quality of architectural design.
	P04	Adequate knowledge of urban design, planning and the skills involved in the planning process.
	P05	Ability to understand the relationships between people and buildings and between them and their environment, and the need to relate buildings and the spaces between them depending on the needs and the human scale.
	P06	Ability to understand the architectural profession and its role in society, in particular by developing projects that take social factors into account.
	P07	Knowledge of methods of investigation and preparation of construction projects.
	P08	Understand the problems of the structural design, construction and engineering associated with building projects.
	P09	Adequate knowledge of physical problems and the different technologies and of the function of buildings so as to provide them with internal conditions of comfort and protection against the climate conditions.
	P10	Design capacity to meet the requirements of building users within the limits imposed by budget factors and building regulations.
	P11	Adequate knowledge of the industries, organisations, regulations and procedures involved in translating design concepts into buildings and integrating plans into planning.

PRE-REQUISITES:

The student must have approved *Cultura y Teoría en Arquitectura I, II, III y IV*.

The student must have approved *Teoría e Historia del Urbanismo tratados en Urbanismo I, II, III*.

The student must attend the class on a regular basis.

SUBJECT PROGRAMME:

Subject contents:

1 - General approach to the subject
2 - Le Corbusier: industry, purism and architecture
3 - Mies van der Rohe: expression of technology
4 - Alvar Aalto: scandinavian organicism
5 - The monumentalism of Louis Kahn and the Critical Regionalism approach from Barragán, Moneo and Siza
6 - Industry and technology: Norman Foster and Renzo Piano
7 - Deconstructivism: Eisenman, Ghery, Hadid and Libeskind
8 - Mass-media and modern iconography: Koolhaas, H&M and SANAA.

Subject planning could be modified due unforeseen circumstances (group performance, availability of resources, changes to academic calendar etc.) and should not, therefore, be considered to be definitive.

TEACHING AND LEARNING METHODOLOGIES AND ACTIVITIES:

Teaching and learning methodologies and activities applied:

Class format: Lecture followed by an open discussion on the subject. Student participation is required.

DUE TO COVID - 19 EMERGENCY SITUATION ONLINE CLASSES WILL BE TAKING PLACE ON REGULAR BASIS ACCORDING TO A POSTED SCHEDULE.

Student work load:

Teaching mode	Teaching methods	Estimated hours
Classroom activities	Master classes	22
	Debates	10
Individual study	Tutorials	1
	Individual study	22
	Research work	10
	Compulsory reading	10
Total hours:		75

ASSESSMENT SCHEME:

Calculation of final mark:

Individual coursework:	25	%
Final exam:	75	%
TOTAL	100	%

*Las observaciones específicas sobre el sistema de evaluación serán comunicadas por escrito a los alumnos al

inicio de la materia.

BIBLIOGRAPHY AND DOCUMENTATION:

Basic bibliography:

FRAMPTON, Kenneth, Historia crítica de la arquitectura moderna, Barcelona: Gustavo Gili, 1998.
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Recommended bibliography:

BENÉVOLO, Leonardo, Historia de la arquitectura moderna, Barcelona: Gustavo Gili, 1982.
BIRAGHI, Marco, Storia dell'architettura contemporanea Vol. I, Torino: Einaudi, 2008.
COHEN, Jean Louis, The Future of Architecture since 1889, Phaidon Press, 2012.
TAFURI, Manfredo y DAL CO, Francesco, Arquitectura Contemporánea, Aguilar Ediciones, Madrid, 1978
ZEVI, Bruno, Historia de la arquitectura moderna, Barcelona: Editorial Poseidón, 1980.

Recommended websites:

ACADEMIA.EDU Architectural History	https://www.academia.edu/People/Architectural_History
ACADEMIA.EDU Architectural Theory	https://www.academia.edu/People/Architectural_Theory
SOCIETY OF ARCHITECTURAL HISTORIANS	http://www.sah.org/publications-and-research

* Guía Docente sujeta a modificaciones