



Number & Title of Course: ARQU 6314: Independent Design Thesis - Project (5 credits)

Course Descriptions: This is a continuation course in which each participant will perform supervised individual work that will demonstrate the student's capacity to identify an architectural issue/design problem that leads to relevant form making and construction. The work will demonstrate as well the capability to formulate a building design that addresses the concerns raised in the previous research phase (ARQU-6313).

Course Goals & Objectives:

The Student will:

- **Understand** the need to broaden the existing fields of architectural knowledge production.
- **Demonstrate** adequate social awareness in order to responsibly serve the needs of local communities.
- **Study** the complexity involved in the formulation of an architectural intervention within the natural, cultural and social environment.
- **Be Motivated** to embark on an experimental, research-based approach to the architectural design problem.
- **Incorporate** life safety standards, codes and regulations in the design of an architectural project.
- **Research** a topic related to architectural design.
- **Cultivate** critical thinking and creative capacities.
- **Participate** in wider scenarios for the discussion and exchange of ideas.
- **Seek** to question the practice of architecture in order to improve the understanding of the activity itself.
- **Complete** a comprehensive analysis of architectural systems in terms of their symbolic, spatial, structural, technical and urban aspects.
- **Design** a comprehensive design proposal of architectural systems in terms of their symbolic, spatial, structural, technical, urban, material, constructive, and urban aspects.
- **Present** the proposal with efficient verbal, textual, and visual communication of the ideas that comprise the proposed building design.

Student Performance Criterion/a addressed:

A01: Communication Skills	Ability
A02: Design Thinking Skills	Ability
A03: Visual Communication Skills	Ability
A04: Technical Documentation	Ability
A05: Investigative Skills	Ability
A06: Fundamental Design Skills	Ability
A07: Use of Precedents	Ability
A08: Ordering Systems Skills	Understanding
A09: Historic Traditions & Global Culture	Understanding
A11: Applied Research	Understanding
B01: Pre-Design	Ability
B02: Accessibility	Ability
B03: Sustainability	Ability
B04: Site Design	Ability
B05: Life Safety	Ability
B06: Comprehensive Design	Ability
B07: Financial Considerations	Understanding
B08: Environmental Systems	Understanding
B09: Structural Systems	Understanding
B10: Building Envelope Systems	Understanding
B11: Building Service Systems	Understanding
B12: Building Materials & Assemblies	Understanding



C01: Collaboration	Ability
C02: Human Behavior	Understanding
C03: Client Role in Architecture	Understanding
C06: Leadership	Understanding
C07: Legal Responsibilities	Understanding
C08: Ethics & Professional Judgment	Understanding
C09: Community & Social Responsibility	Understanding

Topical Outline:

TOPIC	WEEKS
▪ Research and site analysis	02
▪ Schematic Design	03
▪ Design Development	05
▪ Preliminary Presentation	02
▪ Final Presentation	03

Prerequisites: ARQU 6313

Textbooks/ Learning Resources:

The bibliography will be project-related. Some generally recommended texts are:

Alexander, Christopher. *A Pattern Language: Towns, Building, Construction*, Oxford University Press, Nueva York, 1977.

Boyne, D.A.C., (ed). *Architects Working Details*, Londres: The Architectural Press, 1962.

Bonet Correa, Antonio. *Las Claves del Urbanismo*, Barcelona: Editorial Ariel, 1989.

Chueca Goitia, Fernando. *Breve Historia del Urbanismo*, Madrid: Alianza Editorial, 1987.

Ching, Francis D. K. *Building Construction Illustrated*, Nueva York: Van Nostrand Reinhold, 1991.

Kostof, Spiro. *The City Assembled: The Elements of Urban History Form Through History*, Boston: Bulfinch Press, 1992.

Kostof, Spiro. *The City Shaped: Urban Patterns and Meanings through History*, Boston: Bulfinch Press, 1991.

Nesbitt, Kate (ed). *Theorizing a New Agenda for Architecture: An Anthology of Architectural Theory 1965-1995*, Nueva York: Princeton Architectural Press, 1996.

Michalko, Michael. *Cracking Creativity: The Secrets of Creative Genius*, Berkeley, CA: Ten Speed Press, 2001.

Rowe, Collin & F. Koetter. *Collage City*, The MIT Press.

Sepúlveda Rivera, Aníbal. *San Juan: Historia ilustrada de su desarrollo urbano, 1508-1898*, San Juan: Centro de Investigaciones CARIMAR, 1989

LINKS:

<http://www.apastyle.org/elecref.html>

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<http://www.mla.org/>

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<http://books.google.com/books?hl=en&lr=&id=72pHgvNS5gC&oi=fnd&pg=PP7&sig=nLsOX60CgPGSvGJ3txeqFZN70gl&dq=research+methods&prev=http://scholar.google.com/scholar%3Fq%3Dresearch%2Bmethods%26hl%3Den%26lr%3D>

Survey Research Methods by Floyd J Fowler.



<http://www.socialresearchmethods.net/kb/>

The Research Methods Knowledge Base is a comprehensive web-based textbook that addresses all of the topics in a typical introductory undergraduate or graduate course in social research methods.

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