

# ARCH A215: ARCHITECTURAL DRAWING AND DESIGN THEORY 2

Item	Value
Curriculum Committee Approval Date	12/08/2021
Top Code	020100 - Architecture and Architectural Technology
Units	4 Total Units
Hours	144 Total Hours (Lecture Hours 36; Lab Hours 108)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

## Course Description

This intermediate architectural design course teaches theories, principles, methods, and means to the creation of architectural space by manipulation of form, space, and light. Focus is on the critical consideration and communication of spatial sequence and organization, composition, hierarchy, structure, and meaning as an expression of human, aesthetic, and environmental determinants. ADVISORY: ARCH A115 or equivalent skill level. Transfer Credit: CSU; UC.

## Course Level Student Learning Outcome(s)

1. Complete 3-5 design projects that represent different strategies for approaching the creative architectural design process and communicate their design visually and verbally in a jury critique situation as assessed by the instructor.
2. Document their design process and project outcomes in an informal process portfolio format suitable for review and assessment by the instructor.

## Course Objectives

- 1. Create and develop an architectural design concept based on architectural theory and ideals.
- 2. Select and apply appropriate design process methodologies based on design intention.
- 3. Manipulate form, space, and light to achieve a desired spatial quality, movement sequence and experience.
- 4. Organize form, space, and light to achieve a spatial order.
- 5. Utilize ritual and patterns as a means of expressing spatial sequence and movement.
- 6. Utilize narrative storytelling as a method for expressing design intent as architectural experience.
- 7. Identify appropriate spatial proportions needed to support design activity needs.
- 8. Represent functional aspects of architecture by organizing spaces in models and drawings.
- 9. Analyze and compare building typologies with design intention.

- 10. Select and develop structural concepts based on design intention.
- 11. Build and test scale models for design and structural integrity.
- 12. Analyze the characteristics of the natural and built environment.
- 13. Dramatize the cultural and environmental characteristics of a site with an architectural setting.
- 14. Manipulate a site to interact with a design composition.
- 15. Integrate attitudes about aesthetics, typology, structure, and site into a compelling design statement.
- 16. Establish a conceptual proposal with a clear intention and supporting ideas.
- 17. Communicate architectural design intention using images, models, and text.
- 18. Manipulate and edit design concept by responding to questions and suggestions by peers and critics.
- 19. Critically challenge conceptual ideologies by presenting and defending designs in a jury situation.
- 20. Present personal ideas and abilities in a process portfolio format.

## Lecture Content

This is a project-based design course and will incorporate the following outlined course content within the framework of 3-5 design problems, which are developed each semester by the instructor to reflect current professional and academic issues and may challenge or comment on current events or societal trends. Design problems may be more abstract in nature so as to allow for a more intensive focus on formal design and design methodologies, rather than programmatic elements. Design Methodologies as a Response to Architectural Ideals and Theories Aesthetic intention Client/program or typology Structural integrity Analyzing appropriate design methodologies for different situations Establishing a hierarchy of design intent for integrating architectural ideals Design for Aesthetic Intention Theories and concepts of beauty Manipulation of form for desired emotional and cultural response Manipulation of space, proportion and movement through space Manipulation of light as a means of exploring movement and time spatially Establishing spatial rituals as a way of understanding movement through space Narrative (storytelling) as a means of communicating design intent Design for Spatial Movement Interpreting typology needs through spatial proportion and adjacencies Principles of spatial movement Representing functional aspects of architecture through spatial sequences and adjacencies Analyzing building typology and integrating with design intent Establishing spatial hierarchy based on volume and design intent Organizing spaces and formal interpretation Design for Structure Integrity Selecting structural systems based on design intention Selecting structural systems based on spatial and programmatic needs < Interpreting structural systems as compositional design elements Creating structural hierarchies Using model building to explore and test structural concepts Establishing Site and Context Selecting and interpreting site as a setting for architectural composition Exploring the cultural aspects of setting Identifying site characteristics and how they create context Analyzing the environmental characteristics of the natural and built environment Manipulating the site to conform to design intention Interpreting the ground, horizon, and sky into design intent by exploring building placement on the site, views, and the building skyline Concept Development Integrating attitudes about aesthetics, topology, structure, and site into a conceptual approach to design Establishing a hierarchy of conceptual intention and supporting ideas Selecting a design process that supports the concept Communicating the design concept visually and verbally Challenging the Concept (Integrated

throughout the semester) Learn to select design communication methods that support concepts Construct design solutions that build critical arguments in support of a concept Edit design solutions as a response to questions and critiques Present and persuade critics/ audience to accept the design concept and process Verbal and graphic communication of architectural concepts Critiques and juried reviews of architectural design Presentation and Process Methods (Integrated throughout the semester) Parti and process model building Diagramming ideas with drawings and models Drawings that communicate conceptual design intent Models that communicate conceptual design intent Digital media for exploring design and communicating solutions Portfolio methods for showing process and conceptual design

## Lab Content

This is a project-based design course and will incorporate 3-5 design problems, which are developed each semester by the instructor to reflect current professional and academic issues. Conceptual Project Elements to include: Parti models Diagrams Sketches and drawings Photography Digital manipulation of images Design Project Elements to Include: Manipulation of form for desired emotional and cultural response Manipulation of space, proportion and movement through space Manipulation of light as a means of exploring movement and time spatially Establishing spatial rituals as a way of understanding movement through space Narrative (storytelling) as a means of communicating design intent Design studies (models, drawings) to Explore the following: Structure Intention integrity Site and context Mapping Solid, void, light Hierarchy, organizational strategies Materials - selection, strategies Presentation and Process Methods (Integrated throughout the semester) Envisioning information Conceptual communication Portfolio methods for showing process and conceptual design

## Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)
- DE Online Lecture (02X)
- Lab (04)
- DE Live Online Lab (04S)
- DE Online Lab (04X)

## Instructional Techniques

Methodologies are consistent with the professional design process and university architectural studio courses, which include discussion and demonstration of various approaches to design problem solving; instructor feedback and challenges to design concept and process methodologies; small group collaborative design exercises; process sketchbook/journal; and juried critiques of student work which include feedback and suggestions for design revisions.

## Reading Assignments

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## Writing Assignments

Critical thinking skills will primarily be demonstrated through the design, drawing, modeling of architectural solutions and oral and graphic presentations. Some minor writing will occur in the form of graphical text on visual presentations (such as presentation boards, portfolios, and digital media presentations) and in the sketchbook/journal that students will keep to document their design process.

## Out-of-class Assignments

Students will be required to research and present architectural precedents as well as technical and aesthetic systems in support of their designs.

## Demonstration of Critical Thinking

Evaluation and critique of drawings, models, process journal, and concept statements/diagrams by instructor. Juried critiques of design concept and process with instructor and guest professionals. Evaluation of student participation and contribution to group activities by instructor.

## Required Writing, Problem Solving, Skills Demonstration

Critical thinking skills will primarily be demonstrated through the design, drawing, and modeling of architectural solutions. Some minor writing will occur in the form of graphical text on visual presentations (such as presentation boards, portfolios, and digital media presentations) and in the sketchbook/journal that students will keep to document their design process.

## Textbooks Resources

1. Required Ching, Francis D. K. . Architecture: Form, Space, and Order, ed. New York: John Wiley and Sons, Inc. , 2014 Rationale: Architecture FSO is a standard textbook in architectural education across the US.