

# ARCH A030N: ARCHITECTURAL DESIGN AND THEORY 3 NONCREDIT

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	020100 - Architecture and Architectural Technology
Units	0 Total Units
Hours	180 Total Hours (Lecture Hours 54; Lab Hours 126)
Total Outside of Class Hours	0
Course Credit Status	Noncredit (N)
Material Fee	Yes
Basic Skills	Not Basic Skills (N)
Repeatable	Yes; Repeat Limit 99
Grading Policy	P/NP/SP Non-Credit (D), • Letter Non-Credit (L)

## Course Description

This advanced architectural design course is a continuation of ARCH A215, dealing with theories, principles, methods and means used in the creation of architectural space by manipulation of form, space & light in an urban context. Focus is on the conceptual design process of establishing and challenging design criteria, communication and editing of design narrative, and portfolio development. NOT DEGREE APPLICABLE. Not Transferable. ADVISORY: ARCH A215 or equivalent skill level.

## Course Level Student Learning Outcome(s)

1. Verbally and graphically present their design process and outcomes, engage in dialogue about said design work, and defend their design project and process and in a professional, juried critique at a level that meets entry level professional design standards as assessed by the instructor.
2. Produce a process portfolio that documents their design process and outcomes in a format that is appropriate for academic and professional portfolio advancement, as assessed by the instructor.

## Course Objectives

- 1. Select and apply appropriate design process methodologies based on design challenge.
- 2. Demonstrate modeling and drawing techniques based on desired design process.
- 3. Select and utilize multiple design visualization techniques including 2D and 3D media
- 4. Translate a design problem and site characteristics into a set of design criteria.
- 5. Analyze the environmental characteristics of an urban setting.
- 6. Incorporate design criteria that challenge or heighten the experience of a site by manipulating the site appropriately.

- 7. Manipulate form, space, and light to achieve desired spatial proportion and quality, sequence of movement, experience, and formal composition.
- 8. Analyze and conceptualize the cultural and societal patterns of a site and develop appropriate design criteria.
- 9. Apply and innovate appropriate environmental sustainability strategies to support the design concept.
- 10. Formulate design criteria into a conceptual proposal with a clear intention and supporting ideas.
- 11. Communicate architectural design intention using images, models, and text.
- 12. Manipulate and edit design concept in response to questions and suggestions by peers and critics.
- 13. Critically challenge conceptual ideologies by presenting and defending designs in a jury critique situation.
- 14. Present ideas, concepts, and design process and outcomes in a portfolio format.

## Lecture Content

This course is a continuation of Arch A215 and enhances many of the same skills; additionally, the expectation of students performance level is increased and the scale and scope of the design problems are greater. Traditionally, this semester is also used to introduce students to a design competition with the expectation that this will present a suitable design challenge with the added benefits of competing in an expanded professional forum. Typical competition opportunities available in spring semester include Design Village hosted by Cal Poly, San Luis Obispo and the Orange County Chapter/American Institute of Architects Student Design Competition. This is a project-based design course and will incorporate the following outlined course content within the framework of 1-2 design problems (or design competition), which are selected each semester by the instructor to reflect current professional and academic issues and may challenge or comment on current events or societal trends. Selecting Design Methodologies as a Response to an Architectural Design Challenge Analyzing appropriate design methodologies for different situations Establishing a hierarchy of design intent for integrating architectural goals Selecting modeling and drawing techniques that are appropriate to the design criteria Selecting design visualization techniques that emphasize spatial and formal design strategies Design Criteria Analyzing and establishing aesthetic design criteria Site and context as limits and opportunities Program and typology as design framework Culture and society as a source of design challenge Site and Context Interpreting site as a setting for architectural composition Identifying site characteristics and how they create context Analyzing the environmental characteristics of an urban setting Urban design context and design strategies Interpreting the ground, horizon, and sky into the design concept by exploring design interaction with the ground plane, views, and the skyline Manipulating the site to conform to design intention Incorporating and innovating appropriate sustainable design practices Program and Typology Interpreting typology needs through spatial proportion and adjacencies Representing functional aspects of architecture through spatial programming Analyzing building typology and integrating with design criteria Establishing spatial hierarchy based on volume and design criteria Organizing spaces and formal composition Culture and Society Exploring the cultural aspects of a site Challenging the societal relationships between the built environment and program Interpreting cultural and societal patterns into design criteria Translating the Design

Criteria into Concepts Integrating attitudes about site/context, program/typology, and culture/society into concepts Developing concepts into critical arguments Establishing a hierarchy of conceptual intention and supporting ideas Design/Concept Development Manipulation of form for desired emotional and cultural response Manipulation of space, proportion and movement through spatial sequences Manipulation of light as a means of exploring time, context, and the awareness of space Test and challenge the design criteria by building multiple solutions and learning to edit and evaluate the outcomes

## Lab Content

Studio Lab Activities that support Lectures: Model building Digital fabrication Digital visualization Drawing Photography of models Design critiques Challenging and Editing the Concept (Integrated throughout the semester) Select design communication methods that support conceptual exploration Construct a conceptual design proposal Edit design solutions in response to questions and critiques Present and persuade critics/audience to accept your 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 Design Process Maintaining a chronological record of thoughts, ideas, sketches Documenting the model building process Documentation and reproduction of design process and outcomes Scanning and reproducing drawings Integrating images and text Using appropriate graphic techniques for effectiveness and impact

## Method(s) of Instruction

- Regular NC Lect (NC3)
- Regular NC Lab (NC4)
- Online Reg NC Lect (NC7)
- Online Reg NC Lab (NC8)
- Live Online Reg NC Lecture (NCB)
- Live Online Reg NC Lab (NCC)

## 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; field trips to analyze site (when possible); and juried critiques of student work which include verbal feedback and suggestions for design revisions and commendations for achievements.

## Reading Assignments

Readings vary by project and are not text based.

## Writing Assignments

Critical thinking skills will primarily be demonstrated through the design, drawing, and modeling of architectural solutions. Some writing will occur in the form of graphical text and narrative in visual media (such as concept statements, 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

Design process work will occur in and out of class and will include models, digital design, drawings, readings, and research. Out of class assignments will take approx. 10-20 hours per week.

## Demonstration of Critical Thinking

Graded evaluation and verbal critique of drawings, models, design process, concept development, project development, and portfolio by instructor. Juried critiques of design proposal and process with instructor and guest professionals. Student participation in studio activities, positive contributions to the studio learning environment and professional commitment will be assessed by the instructor.

## Required Writing, Problem Solving, Skills Demonstration

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

## Eligible Disciplines

Architecture: Any bachelors degree and two years of professional experience, or any associate degree and six years of professional experience.

## Textbooks Resources

1. Required Ching, Francis D. K. . Architecture: Form. Space and Order, ed. New York: John Wiley Sons, Inc. , 2015
2. Required Bassler, Bruce and John Ray Hoke, eds. . Architectural Graphic Standards: Student Edition, ed. New York: John Wiley Sons, Inc., 2017

## Other Resources

1. Drawing and sketching media, drafting tools/supplies, model-building tools/supplies, art supplies, and digital file storage media (such as USB drives) to be provided by students. Hand outs and limited supplies to be provided by instructor.