

ARCH 50A Course Outline as of Fall 2024**CATALOG INFORMATION**

Dept and Nbr: ARCH 50A Title: DESIGN STUDIO 1

Full Title: Architecture Design Studio 1

Last Reviewed: 5/13/2024

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 157.50

Title 5 Category: AA Degree Applicable

Grading: Grade or P/NP

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly: ARCH 25A

Catalog Description:

Students will learn fundamental concepts used in architectural design to create shapes, forms, and objects as solutions to design goals. The course emphasis will be on the explorative creation of two-dimensional and three-dimensional projects to analyze and explain design theory principles.

Prerequisites/Corequisites:

Course Completion or Current Enrollment in ARCH 52A (or ARCH 26A or ARCH 62A)

Recommended Preparation:**Limits on Enrollment:****Schedule of Classes Information:**

Description: Students will learn fundamental concepts used in architectural design to create shapes, forms, and objects as solutions to design goals. The course emphasis will be on the explorative creation of two-dimensional and three-dimensional projects to analyze and explain design theory principles. (Grade or P/NP)

Prerequisites/Corequisites: Course Completion or Current Enrollment in ARCH 52A (or ARCH

26A or ARCH 62A)

Recommended:

Limits on Enrollment:

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree: **Area** Effective: Inactive:

CSU GE: **Transfer Area** Effective: Inactive:

IGETC: **Transfer Area** Effective: Inactive:

CSU Transfer: Transferable Effective: Fall 2024 Inactive:

UC Transfer: Effective: Inactive:

CID:

Certificate/Major Applicable:

Not Certificate/Major Applicable

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Communicate two-dimensional graphical design solutions using typical architectural design techniques such as sketching, perspective, and conceptual diagrams.
2. Develop design solutions using three-dimensional massing and other physical modeling techniques.
3. Analyze and apply simple design solutions through the use of the iterative design process.
4. Identify and manipulate basic components of formal design elements such as point, line, plane, and mass.

Objectives:

At the conclusion of this course, the student should be able to:

1. Apply basic sketching techniques to illustrate a design concept.
2. Develop simple parti diagrams outlining basic conceptual design schemes.
3. Describe and create various sketched perspective and orthographic views.
4. Create simple physical models of architectural massing and form.
5. Identify and apply formal transformation processes by which sculptural architectonic form is generated.
6. Apply the process of iterative design to develop simple architectural form.
7. Identify the foundational elements of two- and three-dimensional form.
8. Apply qualities of form such as texture, proportion, and shading to achieve a desired outcome.
9. Identify patterns in which architectural massing may be ordered.

Topics and Scope:

- I. Two-Dimensional (2D) Creation Fundamentals
 - A. Sketching and drawing

1. Visualization
 2. Linework: line weight, line types, line density, contrast, and heirarchy
 3. Tools: pencils, pens, markers, and color pencils
 4. Views: plan, elevation, section, isometric, and planometric
 5. Perspective: one-point, two-point, and three-point
 6. Conceptual drawings: parti diagram, adjacency diagrams, circulation diagram, and site analysis
 7. Other types of sketching techniques: contour drawings, gesture sketching, and analytical sketching
- B. Other means of 2D representation
1. Collage
 2. Compositing
 3. Painting
- II. Three-Dimensional (3D) Creation Fundamentals
- A. Basics of physical modeling
1. Materials: foamcore, paper, chipboard, cardboard, balsa, and adhesives
 2. Tools: craft/utility knives, scissors, saws, clamps, cutting mat, and metal straight edges
 3. Techniques: cutting, gluing, and clamping
- B. Form and space creation from surface: curved and folded planes, and faceted surfaces
- C. Formal transformations: uniform/nonuniform scale, rotation, position, repetition, and rhythm
- D. Additive and subtractive composition
- III. Design Process
- A. Idea-based design outcomes and goals
 - B. Employment of design theory fundamentals
 - C. Iterative design process: create and validate cycle
 - D. The architectural parti
- IV. Design Language
- A. Building blocks: point, line, surface, mass, and form
- B. Formal qualities: size, scale, perspective, position, tone, color, texture, repetition, and rhythm
- C. Implicit and explicit space
- D. Ordering systems: grid, network, cluster, datum, radial, linear, and network
- E. Hierarchy
- F. Gestalt perception principles of design
1. Figure/ground
 2. Proximity
 3. Common fate
 4. Similarity
 5. Continuity
 6. Past experience
 7. Closure
 8. Symmetry and order
 9. Common region
 10. Focal point
- G. Color theory
1. Gamut
 2. The color wheel
 3. Color themes: monochromatic, complementary, split-complementary, analogous, triad, tetradic, and pure color
 4. Tone, shade, and tint
 5. Cultural and psychological implications and significance of color

The above Topics and Scope apply to both lecture and lab course components in an integrated format.

Assignment:

Lecture- and Lab-related Assignments:

1. Project-based design exercise(s) (1-4)
2. Project-based design presentations (5-10)
3. Design theory investigations vignettes (3-6)
4. Midterm critical analysis and written reflection (1)
5. Final collaborative design project (1)
6. Final project jury presentation, critical analysis, and written reflection (1)

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Critical analysis and reflections, design theory investigations

Writing
10 - 20%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Design exercise(s) and final collaborative design project

Problem solving
40 - 60%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Project presentations and critical analyses

Skill Demonstrations
10 - 30%

Exams: All forms of formal testing, other than skill performance exams.

None

Exams
0 - 0%

Other: Includes any assessment tools that do not logically fit into the above categories.

Critical analyses and participation

Other Category
5 - 15%

Representative Textbooks and Materials:

Architecture: Form, Space, and Order. 5th ed. Ching, Francis D. K. Wiley. 2023.

Instructor prepared materials