

STATUS: A

COMMON COURSE NUMBER: ARC 2201

COURSE TITLE: Theory of Architecture

CREDIT HOURS: 3

CONTACT HOURS BREAKDOWN:

Lecture/Discussion 48

Lab 00

Other 00

Contact Hours/Week 3

CATALOG COURSE DESCRIPTION:

Prerequisite: ARC 1301, ARC 1701 with a grade of “C” or higher.

Corequisite: ARC 1302

This course provides an understanding of architectonic elements, principles and aesthetics in architecture. It analyzes their application in contemporary and historical architecture and relates their application to architecture design studio solutions. The course also covers the work and philosophies of contemporary architects.

General Education Requirements - Associate of Arts Degree, meets Area(s):
General Education Requirements - Associate in Science Degree, meets Area(s):

UNIT TITLES:

1. Primary Architectural Elements
2. Form and Volumetric
3. Space and Enclosure
4. Form/Space Interaction
5. Organizational Compositions
6. Use and Movement Patterns
7. Proportion, Geometry, and Scale
8. Ordering Principles
9. Image Analysis
10. Design Process and Diagramming
11. Concepts and Transformations
12. Philosophy and Symbolism

I. Course Overview:

Upon successful completion of this course, the students should be able to be able to understand, identify, and communicate fundamental components and concepts of various types of building's architectural design.

II. Units:

Unit 1. Primary Architectural Elements

General Outcome:

- 1.0 The students should be able to identify, understand, and communicate basic elements that generate architectural composition.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 1.1 Understand point generated elements of buildings in context.
- 1.2 Use line generated elements of buildings in context.
- 1.3 Use "exploring" plane generated elements of buildings in context.
- 1.4 Use "exploring" volume generated elements of buildings in context.

Unit 2. Form and Volumetrics

General Outcome:

2.0 The students should be able to identify, understand, and communicate the generation of inherent volumetric characteristics.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 2.1 Identify visual attributes of form thru shape and proportion.
- 2.2 Identify visual attributes of volumetrics by geometry and image.
- 2.3 Identify visual effects of planar and edge articulations of form.

Unit 3. Space and Enclosure

General Outcome:

- 3.0 The students should be able to identify, understand, and communicate spacial qualities and definition by the components of its form.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 3.1 Identify and use horizontal and vertical elements of form as it effects spacial interpretation.
- 3.2 Identify and use the variables of enclosure and the influences of light, ventilation, privacy, and view.
- 3.3 Identify and use specific cases of planar openings as they relate to position and size.

Unit 4. Form/Space Interaction

General Outcome:

4.0 The students should be able to identify, understand and communicate the variety of spacial and volumetric interaction.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

4.1 Understand compatible form geometry unions.

4.2 Understand additive and subtractive form/space constructions.

4.3 Understand the effects of function, context, and image on form/space responses.

Unit 5. Organizational Compositions

General Outcome:

5.0 The students should be able to identify, understand, and communicate the patterns and relationships of spacial compositions.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

5.1 Use the spectrum of adjacency, linkage and envelopment as it relates to spatial flow and dependency.

5.2 Identify sources for creating organizational order.

5.3 Identify centralized, linear, radial, custered, and grid organizations.

Unit 6. Use and Movement Patterns

General Outcome:

6.0 The students should be able to identify, understand, and communicate circulation systems and components.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

- 6.1 Identify primary elements of circulation such as approach, arrival, direction, frequency and flow.
- 6.2 Understand paths created by contextural and functional relationships of space.
- 6.3 Understand the dynamic potential of circulation forms in conjunction with time and space.

Unit 7. Proportion, Geometry, and Scale

General Outcome:

7.0 The students should be able to identify, understand, and communicate compositional refinements of architectural design thru proportion, geometry and scale.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

7.1 Understand proportioning systems' effect on architectural image.

7.2 Use various proportioning systems and understand the role of geometry in their utilization.

7.3 Understand scale thru image, functional, and context.

Unit 8. Ordering Principles

General Outcome:

8.0 The students should be able to identify, understand, and communicate conceptual components of a building's compositional order.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

8.1 Understand the role of ordering principles.

8.2 Identify architectural order in composition thru hierarchies, linear affinities of axis and datum, planar and volumetric symmetry, and repetition.

Unit 9. Image Analysis

General Outcome:

9.0 The students should be able to identify, understand, and communicate various forces that contribute to architectural image.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

9.1 Identify functional derivatives of building image.

9.2 Identify contextual derivatives of building image.

9.3 Identify symbolic derivatives of building image.

Unit 10. Design Process and Diagramming

General Outcome:

10.0 The students should be able to understand, analyze, and generate conceptual diagrams that capture the essence of the design ideas which developed the architectural composition.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

10.1 Understand and draw functional concept diagrams.

10.2 Understand and draw contextual concept diagrams.

10.3 Understand and draw image concept diagrams.

Unit 11. Concepts and Transformations

General Outcome:

11.0 The students should be able to understand, analyze, and generate transformational concepts and diagrams important to the evolution of various parts into an architectural whole.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

11.1 Understand and use dimensional transformations.

11.2 Understand and use additive and subtractive transformations.

11.3 Understand and use positional and rotational transformations.

Unit 12. Philosophy and Symbolism

General Outcome:

12.0 The students should be able to become familiar with basic architectural philosophies that emerge as symbolic expressions of an architect's interpretation of social, cultural, and geographic forces.

Specific Learning Outcomes:

Upon successful completion of this unit, the students should be able to:

12.1 Identify various philosophies of historical precedents.

12.2 Understand the difference between form, space, order, and environmental philosophies.

12.3 Understand philosophies of past and present architects as they relate to specific projects that vary in time, function, geography, and culture.