

# NIRMA UNIVERSITY

## Institute of Architecture and Planning

### Bachelor of Architecture

#### Semester-III

L	W	S	C
-	-	8	12

<b>Course Code</b>	<b>2AR361</b>
<b>Course Title</b>	<b>Architectural Design Studio - III</b>

#### Course Learning Outcomes (CLO):

At the end of the course, students will be able to -

- Compare the design and structural principle form natural object.
- Explore the inspiration from nature for design with material understanding.
- Create, from the above exercise, into design, construction for manmade proposal.

**Syllabus: 15 weeks (8 hours/week)**

**Total Teaching hours: 120 Hrs.**

Sr. No.	Syllabus: Topic	Sub Topic	Teaching hours:
1	Preparatory exercises/ Programmatic and site analysis	<ul style="list-style-type: none"><li>• Part – Whole relationship – Back and forth design processes</li><li>• Exposure to materials, products, assembly constructional principles.</li><li>• Site Analysis<ul style="list-style-type: none"><li>○ Site location or context (Inside city/outside city)</li><li>○ Culture and Socio-economic condition</li><li>○ Climate and Topography</li><li>○ Built/open relation</li><li>○ Distribution of open space/green space</li></ul></li><li>• Focused on understanding the interrelationship between some of the fundamental aspects of architecture.</li></ul>	15 hours
2	Conceptual stage and Schematic design	<ul style="list-style-type: none"><li>• Explore the relationship between ‘order of structure’ and ‘order of space’. Structure is one of the important factors directly affecting the experience of space.</li><li>• Explore the importance of coherence between the rhythms of structure and space.</li></ul>	32 hours

3	Preliminary design to Design development	<ul style="list-style-type: none"> <li>• Understand the relation between various scales of space, forming a rhythm.</li> <li>• Create a coherent experience, it is important to know how to work with dimensional order which act as a unifying thread creating the consistency between the small and the big.</li> <li>• Application to know dynamics between different kinds of forces and material properties which play an important role in constructing structures.</li> </ul>	50 hours
4	Design Resolution with Synthesis of design parameters	<ul style="list-style-type: none"> <li>• Explore the light as an animator of static space. It has a major influence on the experience of space.</li> <li>• Explore the ways of taking different kinds of light to enrich the experience.</li> </ul>	23 hours

L= Lecture, W= Workshop, S= Studio, C= Credit

### Suggested Readings:

1. Ching, Francis D. K. Architecture--form, Space, & Order. Hoboken, NJ: John Wiley & Sons, 2007. Print.
2. Pollio, Vitruvius, and M. H. Morgan. Vitruvius: The Ten Books on Architecture. New York: Dover Publications, 1960. Print.
3. Ching, Francis D. K. Architecture, Form, Space & Order. New York: Van Nostrand Reinhold, 1979. Print.
4. Curtis, Nathaniel Cortlandt. Architectural Composition. Cleveland, O.: J.H. Jansen, 1923. Print.
5. Hardy, Adam. Indian Temple Architecture: Form and Transformation: The Karṇāṭa Drāviḍa Tradition, 7th to 13th Centuries. New Delhi: Indira Gandhi National Centre for the Arts, 1995. Print.
6. Dodds, George, Robert Tavernor, and Joseph Rykwert. Body and Building: Essays on the Changing Relation of Body and Architecture. Cambridge, MA: MIT, 2002. Print.
7. Ching, Francis D. K., Barry Onouye, and Douglas Zuberbuhler. Building Structures Illustrated. Print.
8. Field, M. City Architecture; Or, Designs for Dwelling Houses, Stores, Hotels, Etc. In 20 Plates. With Descriptions and an Essay on the Principles of Design. New-York: D. Appleton, 1854. Print.
9. Yacobi, Haim. Constructing a Sense of Place: Architecture and the Zionist Discourse. Aldershot, Hants, England: Ashgate, 2004. Print.
10. Johnson, Paul-Alan. The Theory of Architecture: Concepts, Themes & Practices. New York: Van Nostrand Reinhold, 1994. Print.
11. Corbusier, Le, and Frederick Etchells. Towards a New Architecture by Le Corbusier. London: Architectural Pr., 1965. Print.
12. Allen, Edward. How Buildings Work: The Natural Order of Architecture. New York: Oxford UP, 1980. Print.
13. Pallasmaa, Juhani. The Thinking Hand: Existential and Embodied Wisdom in Architecture. Chichester, U.K.: Wiley, 2010. Print.
14. Rich, Peter Maurice., and Yvonne Dean. Principles of Element Design. Oxford: Aechitectural, 1999. Print.
15. Kostof, Spiro. A History of Architecture: Settings and Rituals. New York: Oxford UP, 1985. Print.
16. Wittkower, Rudolf. Architectural Principles in the Age of Humanism. New York: W.W. Norton, 1971. Print.
17. Corbusier, Le, Stanislaus Von. Moos, Arthur Rüegg, and Robert Venturi. Le Corbusier before Le Corbusier: Applied Arts, Architecture, Interiors, Painting, and Photography, 1907-1922: Exhibition Guide. New York: Bard Graduate Center for Studies in the Decorative Arts, Design, and Culture, 2002. Print.