

NIRMA UNIVERSITY

Institute of Architecture and Planning

Bachelor of Architecture

Semester-IV

L	W	S	C
-	-	8	12

Course Code	2AR461
Course Title	Architectural Design Studio – IV

Course Learning Outcomes (CLO):

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

- Interpret Environmental, Cultural and Place Dimensions of Space
- Explore the design at building element level, building level, cluster level and site level
- Demonstrate connection between the build space and natural evolved space to convert into comprehensive livable environment.

Syllabus: 15 weeks (8 hours/week)

Total Teaching hours: 135 Hrs.

Sr. No.	Syllabus: Topic	Sub Topic	Teaching hours:
1	Preparatory exercises/ Programmatic and site analysis	<ul style="list-style-type: none">• Factors affecting house form<ul style="list-style-type: none">○ Climate○ Topography○ Social and economic aspect○ Temporary (Nomadic) and permanent (Settler) house structure• Traditional settlement (settler)<ul style="list-style-type: none">○ Community based○ Security based○ Income based○ Climatic and topographic conditions• Temporary settlement (Nomadic)<ul style="list-style-type: none">○ Community based○ Security based○ Income based○ Climatic and topographic conditions• Site Analysis<ul style="list-style-type: none">○ Site location or context (Inside city/outside city)○ Culture and Socio-economic condition○ Climate and Topography○ Built/open relation○ Distribution of open space/green space	14 hours

2	Conceptual stage and Schematic design	<p>Concept of Mass housing</p> <ul style="list-style-type: none"> • Type of housing <ul style="list-style-type: none"> ○ Private housing ○ Public housing • Socio-economic condition <ul style="list-style-type: none"> ○ Income based <ul style="list-style-type: none"> ▪ Low income ▪ Middle income ▪ High income ○ Community/socioeconomic based <ul style="list-style-type: none"> ▪ Public participation ○ Construction technology based • Different type of concepts on housing in present <ul style="list-style-type: none"> ○ Student housing ○ Old people housing ○ Green building ○ Sustainability 	18 hours
3	Preliminary design to Design development	<ul style="list-style-type: none"> • Typology of Mass housing <ul style="list-style-type: none"> ○ Income based ○ Community based ○ Climatic and topographic conditions ○ Typology of house form <ul style="list-style-type: none"> ▪ Low-rise housing ▪ Midrise housing ▪ High-rise housing ▪ Mix use housing • Scale of housing <ul style="list-style-type: none"> ○ Cluster ○ Neighborhood ○ Sector ○ Block ○ City 	50 hours
4	Design Resolution with Synthesis of design parameters	<ul style="list-style-type: none"> • Scale of housing <ul style="list-style-type: none"> ○ Nos of Family ○ Nos of units • Characteristic of housing <ul style="list-style-type: none"> ○ Cluster or grouped ○ Streets ○ Open spaces • Supporting facilities <ul style="list-style-type: none"> ○ Public open space/Garden/Park/Public square/play ground ○ Public Amenities ○ Local commercial area 	38 hours

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

Suggested Readings:

1. Leupen, Bernard, and Harald Mooij. Housing Design: a Manual. NAI Uitgevers, 2018.
2. Habraken, N. J., and Jonathan Teicher. Supports: an Alternative to Mass Housing. Urban International Press, 2011.
3. Bosma, Koos, et al. Housing for the Millions: John Habraken and the SAR (1960-2000). NAI Publishers, 2000.
4. White, Edward T. Site Analysis: Diagramming Information for Architectural Design. ArchiBasX Press, 2013.
5. Correa, Charles. Charles Correa Housing and Urbanisation. Thames & Hudson, 2000.
6. Rybczynski, Witold. How the Other Half Builds. Vol. 1: Space, Centre for Minimum Cost Housing, 1984.
7. Barquin, Carlos. How the Other Half Builds. Vol. 2: Plots, Centre for Minimum Cost Housing, McGill University, 1986.

8. Bhatt, Vikram. *How the Other Half Builds. Vol. 3: Self-Selection Process*, Centre for Minimum Cost Housing, McGill University, 1990.
9. Wates, Nick, and Jeremy Brook. *The Community Planning Handbook: How People Can Shape Their Cities, Towns, and Villages in Any Part of the World*. Earthscan from Routledge, 2017.