School of Planning and Architecture: Vijayawada



(An institution of National Importance under the Ministry of Education, Govt. of India) Survey No.4/4, ITI Road, Vijayawada-520008, Andhra Pradesh, India

Department of Architecture

Course: MSAR111 - Design Studio I (Simple Passive Strategies) Class: I M. Arch(SA), I Sem A.Y. 2024-25

Instructors: Dr. Lilly Rose A & Dr.Shreya Banerjee (Visiting Faculty)

Internal Assessment: 50

End Semester Evaluation: 50

Contact Periods/ week: 15 periods.(55 min each)

Total Marks: 100

12.40pm & 01.30 - 05.10 pm; Friday 1.45 am - 12.40pm & 01.30 - 05.10

Time Table: Monday 11.45 am - 12.40 pm & 01.30 - 05.10 pm; Thursday 1.45 am - Credits: 15

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Attendance: Min 75% Min. Passing Marks: 50% each in Internal & External Assessment and 50% in Aggregate

Objective: 1.To understand and analyse, climate and its elements at both micro and macro level and design projects of varied scales with passive strategies.

2.To use concepts learn in other theory subjects in semester 1, reg. Thermal properties of building materials and appropriate bio climatic analysis using various software and other tools, in the design projects.

Out Line of the Course: As part of the studio project, a real time building site visit, documentation, assessment of architectural strategies incorporated and quantitatively analyzing through a preliminary exercise.

Design Studio that explores strategies for sustainable practices, design, theoretical and/or technological issues that focus for proper scientific architectural thought and practice to lead to climate-responsive, energy efficient and environmentally friendly solutions. This studio design approaches sustainable development for buildings by examining physiology required for human function (comfort, ergonomics, and respiratory requirements, as well as sensory perception) and then by considering how building components and systems affect human performance and well-being. Sustainable development starts with site planning and evaluation, and proceeds through design, construction, commissioning, and occupancy phases. The strategies explored during the course shall culminate into design application.

LECTURE PLAN

WEEK	DATE	TOPIC OF CLASS LECTURE & DISCUSSION	TOPIC OF STUDIO WORK& ASSIGNMENTS / REMARKS
1	Week. 1 - 2 16 Aug - 30 Aug 2024	Book review	Presentation and discussion
2	Week. 3 - 4 02- 13 Sept 2024	Documentation of traditional residences in warm humid climate, quantitative assessment of simple passive strategies incorporated through field measurement	Field measurements and analysis
3	Week. 5 16 Sept - 21 Sept 2024	Field Study to Jodhpur - Documentation of traditional residences in hot dry climate, quantitative assessment of simple passive strategies incorporated through field measurement - Assessment I	Field measurements and analysis
4	Week. 6 23- 27 Sept 2024	Introduction of Multi-family Housing - Literature review and case studies	Case Study presentation
5	Week-7 30 Sept-4 Oct 2024	Mid Semsester week - Assessement II	Mid Semsester Evaluation
6	Week. 8 - 10 7- 25 Oct 2024	Site analysis and Conceptual designs highlighting the integration of passive design strategies for enhanced thermal comfort	Analysis and discussion
7	Week. 11 - 12 28 Oct-8 Nov 2024	Development of final designs and quantitative analysis of passive strategies and assessing their effectiveness in enhancing thermal comfort - Assessment - III	Student's presentation and discussion
8	Week. 13 - 15 11 - 29 Nov 24	Final Presentations drawings and analysis	Discussion
9	Week. 16 02 Dec 24	Assessement IV - Final Internal Marking	Final internal Submission

S. No.	Stages of Evaluation	Weightage in %
1	Continuous assessment through internal design reviews including Mid- semester jury	50
2	End Semester Jury	50
	Total	100

Course Instructors: Head of Department: (Dr. Lilly Rose A) (Dr. Srinivas D)