



School of Planning and Architecture: Vijayawada

S. No. 4/4, NEAR RAMESH HOSPITAL, ITI ROAD, VIJAYAWADA

Department of Architecture

Course: ARC4217 - **Behavioral Architecture (ELECTIVE)**

Class: B. Arch (VIII Semester)

Instructor: Dr. Anil Kumar Chilakapati

Contact Periods/week: 3 hours

Internal Assessment Marks: 50

External Assessment (Theory Examination): 50

Total Marks: 100

Attendance: 75%

Minimum Passing Marks: 50%

To impart knowledge about this relatively new field, born out of the synthesis between architecture and behavioral psychology. Understanding of the multiplicity of living patterns, activities, geometric patterns in space and designing for the same. Knowledge about the behavioural design process, techniques and design contexts.

OUTLINE:

Introduction to the theories of Environment-Behavior relationships. The nature and function of theories. Arousal approach, stimulation approach, Adaptation level, Behavior constraint and Environmental stress approach. Barker's ecological psychology approach.

STRUCTURE:

The lectures will be organized into three sections, including (1) **why** we need to consider social, environmental and behavioral factors in design, (2) **what** social and behavioral factors we should consider, and (3) **how** to address these factors in the environmental design process. Various types of environments will be discussed, ranging from residential and institutional settings, work, learning and leisure environments, to communities and cities.

OBJECTIVES:

In this class, you are expected to (1) become fascinated about social and behavioral factors in environmental design, and (2) learn to examine and address these factors in the design process.

TEACHING PLAN

Sl. No.	Date	Topic of Class/Lecture & Discussion	Nature of Class
1	Week-1	Introduction to the course <ul style="list-style-type: none">✓ Introduction: What/Whom do We Design For?✓ Warm-up: Presentation of Environmental design aspects and Case Studies	LECTURE
2	Week-2	Unit-I. Introduction to Behavioral Architecture Designing for pattern and activities, Archetypal activities/Archetypal spaces:	LECTURE

Sl. No.	Date	Topic of Class/Lecture & Discussion	Nature of Class
3	Week-3	planning of public spaces with reference to age groups and activities.	LECTURE
4	Week-4	Unit-II. Building Systems SPACE-GEOMETRY AND MEANING	LECTURE / EXERCISE
5	Week-5	HIDDEN BEHAVIOURAL ASSUMPTIONS	LECTURE / EXERCISE
6	Week-6	Bypass: Vertical and Horizontal, Stages in the design of building subsystems.	LECTURE
7	Week-7	Unit-III. Building – Behavioral Interface Geometry of spaces, their meaning & connotations	LECTURE / VIDEO
8	Week-8	Social organization of buildings, Behavioral assumptions. Planning of new towns and neighborhoods, borrowed space.	LECTURE / EXERCISE
9	Week-9	Assessment -II	Mid-term Exam -2
10	Week-10	Unit-IV. Behavioral Design Process organization chart, affinity matrices, pictograms: behavioral design process model, design context, activity/adjacency relationship, evaluation chart,	LECTURE / EXERCISE
11	Week-11	Area use frequency program, simultaneous use, community utilization map, occupancy load profile, defensible space, EDRA etc.,	LECTURE / EXERCISE
12	Week-12	Unit-V. Urban Environment	LECTURE / EXERCISE
13	Week-13	Patterns of activity in time and space, the ecology of a neighborhood park and playground, cross-cultural issues, social & psychological issues in the planning of new towns, environmental perceptions and migration,	LECTURE / EXERCISE
14	Week-14	awareness and sensitivity to open spaces, environmental cognition.	LECTURE
15	Week-15	<u>Assessment - III</u>	term Exam -3
16	Week-16	Submission of Final work	Submission

Break-up of Internal Assessment Marks

S. No.	Stages of Evaluation	Weightage	Note
1	Assignment - I	25Marks	Total internal marks 50 Attending all the tests / assignments / seminars is mandatory
2	Assignment - II	25 Marks	
3	Assignment - III	50Marks	

Reference Books:

1. Burnette, C. (1971). *Architecture for human behaviour*. Philadelphia Chapter : AIA.
2. Canter, D. and Lee, T. (1974). *Psychology and the built environment*. New York : Halstead Press.
3. Christopher, A. et al. (1977). *A Pattern Language*. New York : Oxford University Press.
4. Clovis, H. (1977). *Behavioural Architecture*. McGraw Hill.
5. Lynch, K. (1973). *The image of a city*. Cambridge : MIT.
6. Sanoff, H. (1991). *Visual Research Methods in Design*. New York : John Wiley & Sons.
7. Zeisel, J. (1984). *Enquiry by design: Tools for Environment-Behaviour Research*. Cambridge : Cambridge University Press.
8. Zeisel, J. and Eberhard, J. P. (2006). *Inquiry by Design - Environment/Behaviour/Neuroscience in Architecture, Interiors, Landscape and Planning*. New York : W. W. Norton & Company.

(Anil Kumar Chilakapati)
Course Instructors

Head of the Department