



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: MACO125 - Conservation Methods & Materials- II; Conservation Lab **Class:** 1st Yr M. Arch IInd Sem A.Y. 2024-25

Instructors: Ar. Sanjay Bhandari

Contact Periods/ week: 04 periods.(55 min each)

Time Table: Friday (9AM to 12:40 PM) **Credits:** 4

Attendance: Min 75%

Objective: The objective of the course is the application of the theoretical understanding of historic building materials and structural systems performance to variations in different regional contexts in India.

Out Line of the Course: As an extension of the subject taught in the 1st semester, It will focus on historic building technologies from studio project site, structural behaviour of buildings, deterioration processes and conservation interventions.

LECTURE PLAN

WEEK	TOPIC OF CLASS LECTURE & DISCUSSION	TOPIC OF STUDIO WORK& ASSIGNMENTS / REMARKS
1	Introduction to traditional and historic building materials and construction vocabularies in different cultural regions of India. Lime, Timber, earth & terracotta	Lecture
2	Identification of materials and structural building system typologies from studio project.	Lecture and Discussion
3	Inspection, condition assessment and diagnosis of material and structural defects, Spatial and functional assessment of historic buildings.	Lecture and Discussion
4	Identification of construction systems in study region prone to natural decay and other hazards.	Lecture, Discussion & Exercises - Assessment 1
5	Rescue and conservation measures for distressed buildings.	Lecture
6	Field Work - Building systems study and documentation	Documentation
7	Various Methods of Retrofitting/ Mid term assessment	Lecture
8	Strengthening and upgradation of heritage buildings for continued or adaptive reuse	Mid-semester Assessment

9	Individual Case study selection of building system studies from studio exercise. Processing of data in lab collected during field survey	Lab & Discussion
10	continued...	Lab & Discussion
11	Study of individual building systems and materials from studio exercise.	Lecture, Discussion & Exercises
12	Study of building systems and materials from studio exercise.	Lecture, Discussion & Exercises
13	Preparation of conservation specifications, Laboratory testing of materials for material and structural analysis to support sensitive interventions.	Lecture
14	Issue identification and Inspection report for identified building system.	Lecture and Discussion
15	Building System study- Proposals	Lecture and Discussion
16	Final presentation and Review	Discussion & Exercises & Assessment 2

S. No.	Stages of Evaluation	Weightage
1	First stage: Assessment –1	15
2	Second stage: Mid-semester Assessment	20
3	Third stage: Assessment –3	15
	Total	50

Reference Books:

1. Durbin, Lesley, Architectural Tiles: Conservation and Restoration from the Medieval Period to Twentieth Century, 2005
2. Kumar, Conservation of Building Stones, 2001
3. Daniels, Klaus, Low-tech, Light-tech and High-tech: Building in the Information Age, 2000
4. Donhead Shaftesbury, 1998 Cowper, Lime and Lime mortars
5. Forsyth, Michael, Material and Skills for Historic building Conservation, Blackwell Publishing, 2008

Course Instructors:

sd/-
(Ar. Sanjay Bhandari)

Head of Department:

sd/-
(Dr. D Srinivas)