



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:	MACO114 - Methods of Heritage Research, Documentation and Interpretation	Class: M.Arch 1st Year 1st Sem A.Y. 2024-25
Instructors:	Ar. Renuka Wakharkar	Internal Assessment: 50 External Theory Exam: 50
Contact Periods/ week:	03 periods.(55 min each)	Total Marks: 100
Time Table:	Friday (03 periods)	Credits: 3

Objective: The objective is to expose the students to various modes and techniques in organizing data including manual documentation/inspection recording systems

LECTURE PLAN

WEEK	DATE	TOPIC OF CLASS LECTURE & DISCUSSION	TOPIC OF ASSIGNMENTS / REMARKS
1	Week-1	Introduction to various methods and principles of documentation with special focus on manual surveying and documentation techniques.	Lecture
2	Week-2	Understanding of scales and measurements, types of instruments and their uses specific to heritage sites.	Lecture Internal Assessment 1-
3	Week-3	Standards of documentation	Lecture
4	Week-4	Difference between data and information. Ways of collecting information- historical documents, photographs, maps, and other records related to the heritage site	Lecture
		Understanding and need for documenting different types of heritage	

5	Week-5	documenting different types of heritage components. Information processing in heritage areas, Open-source geospatial platform for heritage inventories:	Lecture
6	Week-6	The Arches Project, Use of GIS for heritage resource management in India (Delhi, Bengal, HRIDAYA, SMART Cities) & Abroad.	Lecture
7	Week-7	Appropriate documentation techniques of various scales and components of cultural resources. Tools used for documentation and recording-inventory, survey questionnaires etc.	Lecture
8	Week-8	Errors in measurement and corrections, recording field notes and obstacles in surveying.	Mid Semester Examination
9	Week-9	Methods of organizing site data. Application of documentation techniques.	Lecture
10	Week-10	Fundamentals of Photogrammetry, need and applicability in documentation of heritage sites, Principles; Camera position, focal length, image orientation, relative camera positions, Length and angle units, required software and data	Lecture
11	Week-11	Photogrammetry data analysis for visual exploration, Use of Aerial Mapping and Photogrammetry techniques analysis	Internal Assessment 2-
12	Week-12	Synthesis and graphic presentation of Aerial mapping data regarding heritage resource management in historic urban and cultural landscapes	Lecture
13	Week-13	Introduction to DEM, Terrain Mapping and Analysis. Basic elements of GIS modelling	Lecture

14	Week-14	Heritage applications of 3D Modelling Tools – Geocoding & Dynamic Segmentation for Data management, data display, data query and data analysis	Lecture
15	Week-15	Heritage applications of 3D Modelling Tools, Introduction to LiDAR, Remote sensing Techniques.	Internal Assessment 3-

S. No.	Stages of Evaluation	Weightage
1	First stage: Assessment	15
2	Mid Semester Examination	20
3	Third stage: Assessment	15
	Total	50

Outcomes: Learn various methods of data collection using various tools and techniques

References:

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- Sykes, M. H. (1984). Manual on systems of inventorying immovable cultural property.
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Course Instructors:

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(Renuka Wakharkar)

Head of Department :

sd/-

(Dr. Srinivas Daketi)