

 योजना तथा वास्तुकला विद्यालय, विजयवाड़ा School of Planning and Architecture, Vijayawada An Institute of National Importance, Ministry of Education, Govt. of India Department of Architecture								
ARC513: ARCHITECTURAL CONSERVATION LECTURE PLAN B.Arch 5th Year, IX Semester A.Y. 2026–27								
Objective: To equip students to develop initial understanding to record, assess, maintain and manage historic buildings, structures and sites through introduction to various degrees of conservation. To make students aware of the need for precise and ethical conservation knowledge as a basis for conservation related decisions.								
Instructor: Narasimman R, Pushpendra Kumar. Academic Year: 2026-27 Contact Periods/Week: 03 periods (55 min each) Class Schedule: Tuesday(B) Wednesday(A), 9:00 AM to 11:45 AM				Class: 5th Yr B. Arch IX Sem Credits: 03 Internal Assessment: 50 Marks External Theory Exam: 50 Marks Minimum Attendance: 75%				
S.N O	WEEK	UNIT	TOPICS COVERED (Periods 1, 2 & 3)	LEARNING OUTCOMES	TEACHING METHOD & SPECIAL ACTIVITIES	HERITAGE WALK / FIELD VISIT	ASSIGNMENT / TASK	ASSESSMENT EVENT
1	Week 1	Unit I Introduction to Conservation	P1: Course introduction & syllabus overview; Introduction to Architectural Conservation as a discipline; the built heritage ecosystem in India P2: Definitions & key concepts, What is Heritage? Types: tangible vs. intangible, moveable vs. immovable; The Heritage Spectrum; significance and values P3: Scope of Architectural Conservation; Notable conservation examples globally; Introduction to the heritage profession in India	• Understand the scope and goals of the course • Define heritage and its various classifications • Appreciate the relevance of conservation in contemporary architecture	Illustrated lecture with case study images Group discussion: "What makes a building worth conserving?" ICE-BREAKER GAME: Heritage Around Us: Each student shares a photo of a heritage structure from their hometown. Class discusses conservation challenges and votes on the most compelling case. Prizes for the most interesting heritage story!	—	Photo Essay: Photograph 3 heritage elements in your neighborhood. Write a 50-word description for each significance, current condition, and threats observed. Submit as a single PDF.	—
2	Week 2	Unit I Introduction to Conservation	P1: Terminologies Historicity, Values (aesthetic, historic, scientific, social, use value), Authenticity, Integrity; key distinctions P2: Conservation vocabulary Preservation, Restoration, Reconstruction, Rehabilitation, Adaptive Reuse, Transformation; definitions, distinctions, and illustrated examples from India and abroad P3: Workshop applying terminology to case study photographs; students identify and justify the type of conservation intervention shown	• Define and distinguish core conservation terminologies • Apply conservation vocabulary to real-world examples • Understand the value framework used in heritage assessment	Lecture with rich visual case studies Terminology workshop: identify interventions in case study photos VOCABULARY GAME Conservation Bingo & Pictionary: Teams compete to match terms to definitions and photographic examples. Buzzers (or raised hands) for rapid-fire rounds. Score board on whiteboard. Winner team gets display privilege for their glossary posters.	—	Illustrated Glossary (A4/A3 designed sheet): 25 conservation terms with: (1) Definition in own words (2) One photographic example with source citation Submit as PDF. Best glossaries pinned on the studio wall.	—
3	Week 3	Unit II Theory of Conservation	P1: Introduction to conservation of historic buildings types of historic structures, common causes of decay, overview of conservation interventions in practice P2: Interactive Session History of Heritage Buildings and Cities; class builds a collaborative heritage timeline from ancient to modern India on the whiteboard P3: Concepts and approaches to conservation in India vs. other countries comparative overview of philosophies and practices; group discussion	• Understand global and Indian contexts of heritage conservation • Trace the historical development of conservation thinking • Compare Indian approaches with international conservation practices	Lecture + Interactive Group Timeline Exercise Discussion: "What is unique about heritage conservation in India?" INTERNAL ASSESSMENT 1 (First Stage: 15 Marks): Part A: In-class quiz:10 marks (objective + short answers on Unit I topics) Part B: Short written response: 5 marks Question: "Why should India conserve its built heritage?" Duration: ~45 minutes Conducted in-class	HERITAGE WALK: Guided walk through a local heritage precinct (old city area / colonial quarter). Students identify and classify: • Heritage typologies • Condition states • Threats and pressures Led by instructor + local heritage expert. Duration: ~2 hours (can be scheduled separately).	IA1: In-class quiz + short essay (15 marks) Heritage Walk Report: Document 5+ structures observed name, typology, approx. age, condition, threats noted. Submit with annotated photographs (max 2 pages A4).	INTERNAL ASSESSMENT 1 First Stage 15 Marks
4	Week 4	Unit II Theory of Conservation	P1: Conservation as a concept philosophical underpinnings; John Ruskin's Seven Lamps; Viollet-le-Duc's rationalist approach; William Morris and SPAB; the debate between restoration vs. preservation P2: History of the Conservation Movement evolution from 19th-century Europe to the global movement; key milestones, ICOMOS (1965), World Heritage Convention (1972) P3: Western Context vs. Eastern Context Japanese Sōken (periodic renewal), Indian living heritage traditions; continuity vs. material authenticity debate	• Trace the intellectual history of conservation thought • Compare Western and Eastern conservation philosophies • Understand the ideological foundations of modern conservation practice	Lecture + Comparative analysis with readings Brief readings: excerpts from Ruskin and Viollet-le-Duc shared in advance STRUCTURED DEBATE East vs. West: "Whose Conservation Philosophy Fits India Better?" Class split into two teams. • 10 min: Preparation & quick research • 5 min: Arguments per team • Cross-examination + class vote Instructor moderates and provides debrief session.	—	Reflection Essay (500 words): "Compare Western and Eastern approaches to architectural conservation. Which philosophy is more appropriate for the Indian context, and why?" Reference at least 3 conservation theorists. Properly cited. Submit as PDF.	—
5	Week 5	Unit II Theory of Conservation	P1: Theory and philosophy of conservation Alois Riegl's Value Theory; Cesare Brandi's Theory of Restoration; Bernard Feilden's approach; Nara Document on Authenticity (1994); ICOMOS frameworks P2: Institutional aspects ASI, INTACH, NMA, State Archaeology Depts., UNESCO, ICOMOS, World Monuments Fund roles, mandates, jurisdictions, funding P3: Special Guest Lecture Practicing Conservation Architect / INTACH Representative	• Apply major conservation theories to real case studies • Understand the roles of conservation institutions at various scales • Gain firsthand insight from a conservation professional	Lecture (Periods 1 & 2) SPECIAL GUEST LECTURE (Period 3): Invited speaker: Conservation Architect / INTACH Rep. Topic: "Conservation Practice in India: Challenges, Ethics & Opportunities" • 30-min talk + 20-min open Q&A Students prepare 2 questions each before the lecture. Post-lecture debrief: Key takeaways discussion.	—	Organisation Profile Poster (A3): Research one conservation organisation (national OR international). Cover: • Founding year & mandate • Key achievements • One significant conservation project Post on studio wall for peer viewing in Week 6.	—
6	Week 6	Unit II Theory of Conservation	P1: Charters in conservation Venice Charter (1964), Burra Charter (1999), Nara Document (1994), Appleton Charter (1983), Florence Charter (1981); key principles and how they differ from each other P2: World Heritage Legislation UNESCO World Heritage Convention 1972; Outstanding Universal Value (OUV), 10 Inscription Criteria, buffer zones, Reactive Monitoring, Danger List; World Heritage statistics for India P3: Conservation Acts in India AMASR Act 1958 & 2010 Amendment; Ancient Monuments Act; prohibited zone (100m) & regulated zone (200m); Archaeological Acts; penalties and permissions regime	• Explain the significance of major conservation charters • Describe the UNESCO World Heritage inscription and monitoring process • Identify key Indian conservation legislation and provisions	Lecture with document excerpts and visual analysis Poster walk: Students view org-profile posters from Week 5 assignment QUIZ GAME World Heritage Legends (3 Rounds): Round 1: Identify World Heritage Sites from photographs Round 2: Match charters to their key clauses Round 3: Conservation law rapid-fire questions Teams: 4–5 members each. Score tracked on whiteboard. Winner gets certificate!	—	Research Paper (2 pages A4): Select one Indian World Heritage Site. Analyze: (1) Why was it inscribed? Which OUV criteria apply? (2) Current conservation challenges (3) Which charter principles are applied? Cite at least 3 sources. Submit as PDF.	—
7	Week 7	Unit III Conservation Practice	P1: Present context of heritage conservation in India ASI statistics, INTACH listing, challenges of urban heritage, demolition pressures, gentrification, climate change impacts on heritage structures P2: Heritage conservation abroad case studies: Rome (Italy), Kyoto (Japan), Bath (UK), Istanbul (Turkey); comparative successes and challenges P3: Heritage assessment frameworks SWOT analysis for heritage sites, grading systems (Grade I/II/III), Conservation Area practices, Heritage Impact Assessment (HIA)	• Compare heritage conservation contexts: India and internationally • Apply SWOT and grading frameworks to heritage sites • Understand Conservation Area and HIA practices	Lecture + Case Study Analysis (comparative) FIELD PREPARATION WORKSHOP: Pre-visit documentation training. Students practice filling heritage survey forms using photographs of assigned structures. Introduction to: • Condition assessment terminology • Decay pattern classification • Documentation notation standards	PRE-VISIT PREPARATION: Each student assigned a heritage structure from a provided list. Must research and document before the Week 9 field visit. Pre-visit sheet covers: • Name, location, typology • Approximate date of construction • Known history & condition issues	Pre-Visit Documentation Sheet: For assigned heritage structure (1) Name, location, typology, approx. date (2) Known historical context (3) Secondary-source photographs (4) Known conservation issues Submit before field visit in Week 9.	—
8	Week 8	Unit III Conservation Practice	P1: Adaptive reuse principles and precedents; examples of industrial buildings, colonial structures, religious spaces adapted for new uses; design guidelines; the economic and environmental case for reuse over demolition P2: Infill design principles of context-sensitive design, scale, materials, setback; upgradation programs in historic precincts (Ahmedabad Heritage Walk Zone, Pondicherry Heritage Zone, Chandni Chowk redevelopment) P3: MID-SEMESTER EXAMINATION (All 3 contact periods used for exam + review)	• Understand adaptive reuse as a conservation and economic strategy • Apply infill design principles in heritage contexts • Demonstrate knowledge of Units I–III in the examination	Lecture (Periods 1 & 2) MID-SEMESTER EXAMINATION (Period 3 onwards): Invigilated written examination Covering: Units I, II & III Duration: 2 hours Format: • Section A: Short answers (10 marks) • Section B: Essay questions (10 marks) Total: 20 Marks	—	Post-exam: Students begin collecting case study material for group conservation case study (to be presented in Week 15). Form groups of 3–4 students. Instructor assigns/approves case study sites.	MID-SEMESTER EXAM 20 Marks

9	Week 9	Unit III Conservation Practice	P1: Conservation of traditional water systems typology of stepwells (vav/baoli), temple tanks, pushkarinis, kunds, nalas, johad; cultural significance; examples from Gujarat, Rajasthan, Tamil Nadu P2: Financing & implementation framework Central/State govt grants, PPP models, CSR funding, ADB/World Bank mechanisms, endowment models; project management workflow in conservation; role of conservation architect in project team P3: On-site documentation exercise at the heritage water system visit site	- Identify types of traditional water heritage and their cultural significance - Understand financing mechanisms and project management for conservation - Practice first-hand documentation of a heritage structure on site	Lecture (Periods 1 & 2) ON-SITE DOCUMENTATION (Period 3 on-site): Students document the visited water heritage site: - Measured sketches - Condition assessment - Material identification - Decay mapping - Systematic photography Groups of 2–3 students with survey sheets.	HERITAGE SITE VISIT: Documented visit to a local traditional water heritage system: - Stepwell (vav / baoli), OR - Temple tank, OR - Historic reservoir Half-day / full-day excursion. Students work in pairs. Guided by subject instructor.	Field Visit Documentation Report (min 4 pages + photos): (1) History & significance of the site (2) Architectural description & typology (3) Measured hand-drawn sketches (approx. scale) (4) Condition assessment with decay map (5) Conservation recommendations Submit as PDF document.	—
10	Week 10	Unit IV Diagnosis Tools & Technologies	P1: Inventory and documentation techniques types of heritage inventory (state, national, thematic), INTACH Heritage Census, UNESCO inventory guidelines; grading criteria (Grade I, II, III) and their legal implications P2: Inspection and survey of historic buildings visual inspection methods, condition assessment checklists, decay and defect mapping, crack surveys, material pathology, structural condition indicators P3: Field Documentation Workshop student groups survey an assigned heritage structure near campus using standardized survey forms (in-class or nearby site)	- Understand heritage inventory systems and grading frameworks - Apply inspection and condition assessment methods to historic buildings - Conduct and document a basic heritage survey independently	Lecture (Periods 1 & 2) DOCUMENTATION WORKSHOP (Period 3): Student groups (3–4 per group) survey an assigned heritage structure using a standardized survey form. Instructor reviews work in real time. Groups rotate to peer-review each other's condition assessments. Real-time Q&A and feedback.	MICRO FIELD EXERCISE: Group survey of a heritage structure on or near campus. Students complete: - Condition assessment - Decay map sketch - Systematic photographic record within the contact period. Form: Standardized assessment form (provided).	Heritage Inventory Form: Complete a standardized inventory form for an assigned heritage element: - Identification & typology - Grading recommendation (with justification) - Historical context (brief) - Condition assessment findings - Annotated photographs Submit as PDF (digital submission).	—
11	Week 11	Unit IV Diagnosis Tools & Technologies	P1: Process of identification of heritage assets criteria for significance assessment (historic, architectural, social, scientific, rarity); thematic listing; community significance; INTACH identification guidelines P2: Methodology of listing INTACH listing process, state heritage committees, ASI grading process; public consultation and appeal mechanisms; listing outcomes and implications for property owners and development P3: Computer applications in heritage GIS for heritage mapping, Heritage BIM (HBIM), Monitoring Information Systems (MIS); LIVE DEMO of GIS heritage tool	- Understand the criteria and process for heritage asset identification - Apply listing methodology using INTACH/ASI frameworks - Explore digital tools (GIS, HBIM, MIS) for heritage documentation	Lecture (Periods 1 & 2) TECH DEMO SESSION (Period 3): Live demonstration of: - GIS heritage mapping (QGIS + heritage data layer) - Heritage BIM concepts (3D model of a heritage structure) - MIS platforms used by ASI and INTACH Students follow along on shared screen or personal devices. Hands-on: students locate and mark heritage assets on a GIS map.	—	Digital Heritage Entry: Using provided digital template (Excel / Google Form), create a comprehensive inventory entry for a local heritage structure. Include a heritage significance score using the provided scoring matrix. Submit digitally before next class.	—
12	Week 12	Unit IV Diagnosis Tools & Technologies	P1: Photography in heritage documentation principles of orthographic and rectified photography; controlled photographic technique; systematic photographic recording protocols for historic buildings; equipment and settings P2: Aerial photography and drone surveys types of aerial surveys, UAV/drone applications in heritage, DGCA regulations for India, case studies of drone surveys at Indian heritage sites P3: Photogrammetry principles of Structure from Motion (SfM); software overview (Agisoft Metashape, Meshroom, 3DF Zephyr); HANDS-ON practical: students photograph a heritage element and generate a 3D model	- Apply systematic photography protocols for heritage documentation - Understand aerial and drone survey applications in conservation - Generate a basic 3D photogrammetric model of a heritage element	Lecture (Periods 1 & 2) PHOTOGRAMMETRY PRACTICAL (Period 3): Students use smartphones to photograph a selected heritage element (30–50 overlapping images). Images processed using free software (Meshroom / 3DF Zephyr Free). 3D model exported and evaluated for documentation quality. Groups of 2–3 students.	—	INTERNAL ASSESSMENT 3 Part A (Part of Third Stage, 15 Marks total) Submit: (1) Systematic photo set of an assigned heritage structure (min. 30 images, captioned with shot position / coverage plan) (2) Photogrammetric 3D model or orthophoto (exported from Meshroom / Zephyr) (3) 1-page methodology note Evaluation: Coverage, accuracy, clarity	IA3 — THIRD STAGE Part A (15 Marks total with IA4)
13	Week 13	Unit V Conservation Management	P1: Conservation legislation at national level AMASR Act 1958 & 2010 Amendment; prohibited zones (100 m) and regulated zones (200 m); types of centrally protected monuments; penalties and permission procedures P2: State and local heritage legislation state archaeology acts, heritage city bylaws, UDCR heritage provisions; listed building consent procedures; role of heritage conservation committees at state and municipal levels P3: Legislation pertaining to urban conservation programs; Special Guest Lecture: Legal Expert on Conservation Law in India	- Understand the national legislative framework for heritage protection - Identify state-level and urban conservation legal instruments - Navigate the legal landscape for conservation interventions	Lecture (Periods 1 & 2) SPECIAL GUEST LECTURE (Period 3): Invited speaker: Conservation Lawyer / Legal Expert Topic: "Navigating Conservation Law in India" Content: - Landmark court orders for heritage - PILs in heritage protection - Real cases: developer vs. heritage Open Q&A: Students apply questions to their case study sites.	—	Legal Framework Diagram (A3): Map ALL applicable legislation for one specific heritage site in your city: - National, state, municipal laws - Applicable zones and setbacks - Required permissions for any intervention - Relevant court orders if any Format: Annotated diagram, hand-drawn or digital.	—
14	Week 14	Unit V Conservation Management	P1: Community participation in conservation why communities matter; participatory heritage approaches; ethical dimensions; examples of community-led conservations; documenting intangible heritage linked to structures P2: Government initiatives HRIDAY (Heritage City Development and Augmentation Yojana), PRASAD, Smart Cities Mission heritage component, National Mission on Cultural Mapping; progress, achievements, and limitations P3: Community Mapping Workshop + Guest Lecture from Municipal Conservation Planner / Urban Development Authority representative	- Understand community roles in sustainable conservation - Evaluate major government heritage conservation programmes in India - Apply participatory mapping to identify community heritage assets	Lecture (Periods 1 & 2) COMMUNITY MAPPING WORKSHOP (Period 3): Teams map heritage assets in an assigned neighbourhood using Google My Maps. Categories: - Listed structures - Community heritage (informal) - At-risk structures - Cultural landmarks / sacred spaces GUEST LECTURE: Municipal Conservation Planner on HRIDAY / Smart Cities heritage.	NEIGHBOURHOOD HERITAGE WALK: Students observe and map community heritage assets in an urban precinct: - Informal heritage - Street art & cultural elements - Sacred trees & community spaces - Assets outside formal inventories Duration: ~1.5 hours Output: Google My Maps link of documented community heritage.	Community Engagement Strategy (max 3 pages): Design a participatory conservation plan for a selected heritage precinct: (1) Stakeholder map (2) Min. 3 community engagement activities (3) Timeline of engagement (6-month plan) (4) Expected outcomes & success indicators Submit before Week 15 presentation date.	—
15	Week 15	All Units Review & Capstone	P1: Course review lecture integration of key concepts across all 5 units; common themes: authenticity, values, legislation, community, documentation tools; guidance for external theory exam preparation P2: Student Group Case Study Presentations Groups 1, 2, 3 (10-min presentation + 5-min Q&A per group) P3: Student Group Case Study Presentations Groups 4, 5 (10-min + 5-min Q&A); Peer review debrief; Course feedback session; Closing ceremony Heritage Champions certificates awarded	- Integrate and apply learning from all 5 units - Present and defend a conservation case study professionally - Critically evaluate peers' conservation analyses - Demonstrate effective communication in architectural conservation	Review Lecture (Period 1) CASE STUDY PRESENTATIONS (Periods 2 & 3): 5 groups present semester-long case study. Peer evaluation using provided rubric. Instructor + guest evaluator: structured feedback. CLOSING CEREMONY: "Heritage Champion" certificate: Best overall case study presentation "Heritage Walk Guide" certificate: Students who led peer heritage walks	FINAL CAPSTONE HERITAGE WALK: Celebratory closing walk Students take turns acting as heritage interpreters / guides for their classmates. They narrate significance of structures they documented during the semester. Applies all course learning to live heritage interpretation. Duration: ~1.5 hours	INTERNAL ASSESSMENT 4 Part B (Third Stage: 15 Marks Total with IA3) Group Case Study Report (min. 8 pages A4) + Group Presentation (10 minutes) Breakdown: - IA3-A (Photo/Photogrammetry, Wk 12): 7 marks - IA4-B (Case Study Report): 5 marks - IA4-B (Presentation quality): 3 marks Total Third Stage: 15 Marks Submit written report on presentation day.	IA4 — THIRD STAGE Part B Total: 15 Marks

REFERENCE BOOKS					
S.No.	Author(s)	Title	Publisher	Year	Notes
1	Strike, James	Architecture in Conservation: Managing Development at Historic Sites	Routledge	1994	Heritage: Care-Preservation-Management series
2	Thakur, N.	A Conservation Policy for India: An Introduction to the Context	Inst. of Advanced Architectural Studies, Univ. of York	1986	Unpublished conservation studies report
3	Nagar, Shanti Lal	Protection, Conservation and Preservation of Indian Monuments	B.R. Publishing	—	Covers Indian legislative and practical frameworks
4	Ghosh, S.; Gupta, R.; Gupta, S.	Architectural and Urban Conservation	Jadavpur University Press	—	Urban conservation case studies from India
5	Jokilehto, Jukka	History of Architectural Conservation	Butterworth-Heinemann	2002	Comprehensive global history of conservation thought
6	Biswas, S.S.	Protecting the Cultural Heritage: National Legislation and International Conventions	ASI / UNESCO	1999	Covers Indian and international legal frameworks
7	Pant, Dharendra Kumar	Care and Administration of Heritage Monuments in India 1784–1904	Aryan Books International	2012	Historical development of monument conservation in India
8	Bracker, A. & Richmond, A. (Eds.)	Conservation: Principles, Dilemmas and Uncomfortable Truths	Butterworth-Heinemann / V&A	2009	Critical essays on conservation ethics and dilemmas
9	Cumming, John (Ed.)	Revealing India's Past	The India Society, London	1939	Historic survey of Indian archaeological conservation
10	Glendinning, Miles	The Conservation Movement: A History of Architectural Preservation	Routledge	2013	Global history of preservation as a movement and discipline
11	Cleere, Henry	Approaches to the Archaeological Heritage: A Comparative Study of World Cultural Resource Management	Cambridge University Press	1984	Comparative international study of heritage management
12	Feilden, Bernard M.	Conservation of Historic Buildings	Butterworth-Heinemann	2003 (3rd Ed.)	Definitive technical reference on conservation of historic buildings
ADDITIONAL RECOMMENDED RESOURCES					
1	Journals	Journal of Architectural Conservation (Routledge); APT Bulletin (APTI); Studies in Conservation (IIC)			
2	Online	ICOMOS Digital Library: https://www.icomos.org/en/resources UNESCO World Heritage: https://whc.unesco.org			
3	India Specific	ASI Publications (asi.nic.in) INTACH Charter and Guidelines (intach.org) NMMA Documentation			
4	Software	QGIS (free GIS) Meshroom (free photogrammetry) 3DF Zephyr Free SketchUp (HBIM modelling)			
5	Charters	Venice Charter 1964 Burra Charter 1999 Nara Document 1994 ICOMOS India Charter 2017			