PRACTICAL TRAINING IN ENVIRONMENTAL MONITORING AND MUSEUM CONSERVATION

As part of their internal assessment for the course **"HIS-6402: Museology: Theory and Practice,"** students of the M.A. History program at the D.D. Kosambi School of Social Sciences and Behavioural Studies, Goa University, participated in an intensive, hands-on training session focused on preventive conservation from 26th to 28th August 2026. The primary objective was to fulfill their requirement of 10 hours of practical training in the use of basic tools and equipment to monitor and manage environmental factors—specifically temperature and humidity levels—within a storage or exhibition space, thereby bridging academic theory with practical museum curation.

The session began with an introduction to environmental control, establishing why it is the cornerstone of preventive conservation. Students were briefed on how microclimatic fluctuations act as silent catalysts for artifact degradation, accelerating chemical, biological, and physical breakdown. During this theoretical briefing, they received comprehensive information on how environmental factors affect various materials, learning about the specific vulnerabilities of organic items like paper, textiles, and wood to humidity extremes, as well as how inorganic objects such as metals, ceramics, and mixed-media artifacts react to moisture and temperature shifts.



Introduction to environmental control

To transition from theory to practice, students were trained in the handling and operation of essential diagnostic tools, primarily hygrometers. Rather than restricting their focus to isolated object materials, the students performed practical monitoring across all galleries of the museum space. Working in structured teams, they learned how to calibrate, position, and read hygrometers to measure ambient relative humidity and temperature across different zones of the exhibition halls, factoring in variables like windows, display cases, and lighting sources.



A Hygrometer with display reading relative humidity in percentage terms and temperature in centigrade scale

The students systematically recorded environmental parameters over designated intervals, logging their findings into detailed observation tables that tracked date, time, exact gallery location, temperature, relative humidity, and prevailing weather conditions. Using these gathered datasets, the students translated raw numerical logs into graphical representations, such as line graphs depicting fluctuations in temperature and relative humidity over time. This visualization made it easier to identify peak stress windows and draw analytical conclusions regarding the overall stability of the exhibition spaces.

Drawing conclusions from their gallery-wide data analysis, students explored practical mitigation techniques to stabilize microclimates and protect collections. They evaluated passive mitigation strategies, such as utilizing moisture-buffering materials within closed display cases and the strategic placement of shading devices, alongside active mitigation methods like mechanical dehumidifiers and air-conditioning systems to maintain safe environmental thresholds. Based on their findings and conclusions they discussed preventive layout strategies, including repositioning sensitive displays away from exterior walls and high-traffic entry points, successfully equipping future historians and museum professionals with the technical acumen required to safeguard cultural heritage.

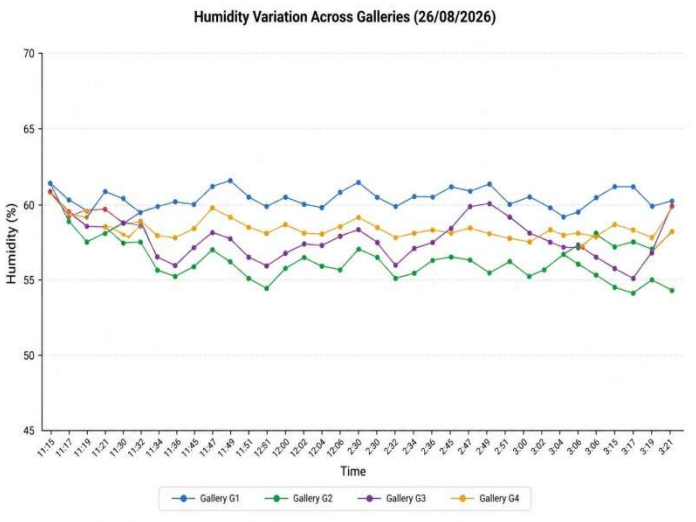
ACTIVITY MOMENTS

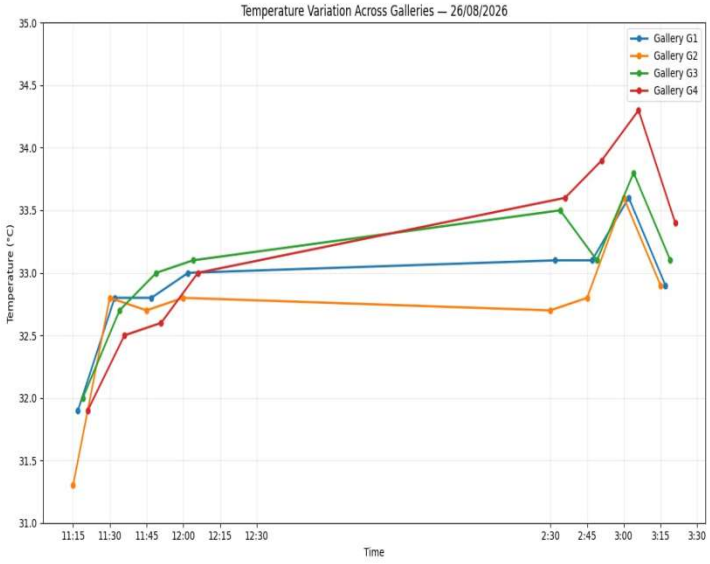


STUDENTS MONITORING ENVIRONMENTAL PARAMETERS

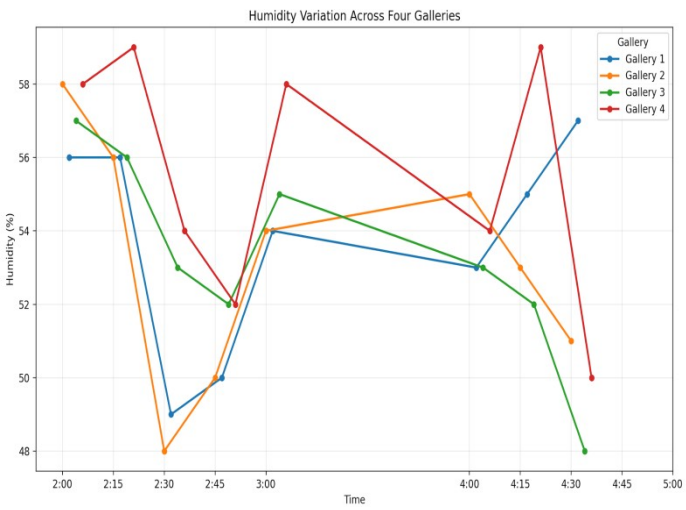
GRAPHICAL REPRESENTATION OF OBSERVATIONS

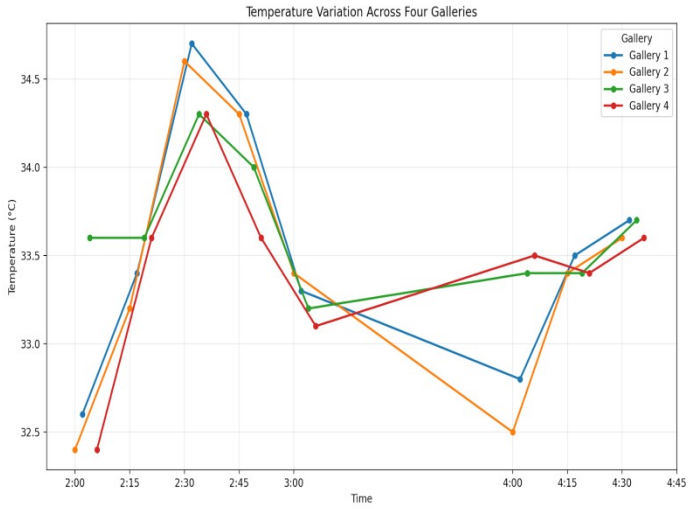
26/08/2026





27/08/2026





28/08/2026

