



TEXAS TECH UNIVERSITY
COLLEGE OF ARCHITECTURE

ARCH 5321
HISTORIC BUILDING TECHNOLOGY AND
DOCUMENTATION
SYLLABUS

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Office Hours:
By appointment Tuesday & Thurs. 1:30 p.m. - 3:00 p.m.

Initial Class Time and Location:
Thursday, January 14, 2010- ARCH507
Architecture Building

GOALS:

Research

- Introduce historic materials, decay processes and treatment methods.
- Original Source research, archival research.
- Introduce field research and sketch notation skills, both by hand and with digital technology.
- Introduce the importance of recording historic structures accurately and precisely.
- Large Format Photography

Historic Building Documentation Standards

- Introduce Secretary of the Interior Standards for documentation of historic structures.
- Develop and understand field note recording procedures.
- Introduce Historic American Building Survey (HABS) procedures and computer protocol.
- Introduction to HABS history format.
- Introduction to National Register Nomination format

Historic Preservation Philosophy

- Develop appreciation and knowledge of historic built environment
- Understand importance of preservation research as a basic tool for cultural resource management.
- Introduce the HABS collection of the Library of Congress, Prints and Photographs Division as a basic research source for historians, archeologists, sociologists and others interested in history as it is represented by the built environment.

Required Text

Website for the Preservation Briefs: www.cr.nps.gov/hps/tps/briefs

References:

Conservation of Historic Buildings

by Bernard M. Feilden

Conserving Buildings: Guide to Techniques and Materials, Revised Edition

by Martin E. Weaver, F. G. Matero

The Investigation of Buildings: A Guide for Architects, Engineers, and Owners by Donald Friedman

Historical Building Construction: Design, Materials, and Technology by Donald Friedman

Historic Preservation: Project Planning & Estimating by Swanke Hayden Connell Architects

Dictionary of Building Preservation by Ward Bucher (Editor), Christine Madrid (Editor)

DESCRIPTION: Procedures and methods of restoration addressing processes of restoration and stabilization of historic buildings. Focusing upon physical structure, it investigates problems inherent in the deterioration of building fabric, restoration, and conservation procedures. The course also addresses the various techniques of documentation of historic structures and the application of these techniques in preservation design.

PREREQUISITE: Graduate standing and college approval.

INTENT: The intent of the course is to provide the student with knowledge of procedures employed in restoration and documentation work.

Restoration deals with materials and standards. Included is discussion of problems causing deterioration of building fabrics, detection of problems, research necessary for their solution, and processes for stabilization or restoration. Forces of weathering, mechanical faults, and chemical intervention also are considered. Finally, standards of historic restoration, including those imposed by the National Park Service are discussed.

Documentation deals with a thorough analysis of structures. Available resources determine the extent of the documentation work. The research sources for obtaining information about structures will be discussed along with the format for architectural and historical data sheets, and the role and methods of photo documentation.

METHOD: The course consists of lectures, discussions, student research, and student presentations. Lectures by the instructor will provide a survey of various processes of preservation and methods of restoration and documentation techniques as well as focusing on National Register Nomination procedures and submissions.

Class discussions require participation of all students. Lectures and student presentations provide the points of departure for these discussions. As an architectural history elective, this is a writing intensive class.

Materials research presentation will be based upon building materials, their deterioration and repair. Each student will research assigned materials, investigating historic uses of materials, techniques of fabrication, problems of deterioration, and methods of repair. The research will be presented to the class, along with a typed paper minimum length 20 pages including images (no more than 5 pages total for images) and an extensive bibliography in MLS format. Each presentation should be illustrated with visual examples and proper citations.

IT IS THE POLICY OF THE COLLEGE OF ARCHITECTURE TO USE TURABIAN GRAMMATICAL RULES AND LONG FOOTNOTES, NOT IN TEXT CITATIONS.
<http://www.ithaca.edu/library/course/turabian.html>

Digital copies of all work (including submission on a CD), web/server postings will be required of all written work as well as presentations.

Documentation projects will be based on actual documentation of historic structures. Students will participate in the field work and preparation of sample documents.

GRADES: Grades will be determined as follows:

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| • Research and Writing | 50% Writing Assignments |
| • Class presentations | 20% |
| • Documentation projects | 15% |
| • Attendance | 10% |
| • Participation | 5% |

SUBJECT MATTER

- National Register Nomination
- Restoration standards
- Guidelines for restoration
- Wood
- Inspection and restoration of adobe
- Restoration/stabilization of stone and brick masonry
- Historic roofing
- Historic exterior wall finishes
- Concrete
- Interior finishes
- Measured drawings
- Documentation techniques

EQUAL OPPORTUNITY AND ACCESS TO FACILITIES

The University is committed to the principle that in no aspect of its programs shall there be differences in the treatment of persons because of race, creed, national origin, age, sex, or disability, and that equal opportunity and access to facilities shall be available to all. If you require special accommodations in order to participate, please contact the instructor. Students should present appropriate verification from Disabled Students Services, Dean of Students Office. No requirement exists that accommodations be made prior to completion of this approved University process.

ATTENDANCE POLICY

The College of Architecture follows the class attendance policy set out in the Undergraduate Catalog, 2002-2003, page 75 and the Graduate Catalog, page 62. The college supports the definition of four absences as being excessive and constitutes cause for having the student drop the class or receive a grade of "F".

The class is a tobacco and gun free environment.