

Arch 551 Conservation Methods and Materials

Units: 3

Spring 2025—Wednesdays—Time: 9:00 am – 11:50 am Syllabus: will be updated before January 15, 2025

Location: Harris Hall, Room 102

Instructor: Peyton Hall, FAIA, Adjunct Professor

Office: Watt Hall, shares 3rd floor office with Trudi Sandmeier

Office Hours: In person by appointment, by telephone, or USC Zoom video conference as

requested by student; usually available at Watt Hall immediately after class.

Contact Info: peytonha@usc.edu, 213.445.5557 mobile phone for voice or text. All students

are **ENCOURAGED** to contact the instructor for questions and discussion.

Teaching Assistant: None

Communications outside of the classroom will be distributed to all students using Brightspace and/or emailed to the address of registered students at their *@usc.edu address. USC requires faculty to use USC Email for USC-related communications in order to maintain as high a level of online security as possible.

IT Help:

Contact Info: https://arch.usc.edu/itrequest

Course Description

Concepts and techniques for building conservation including identification of treatments, recordation and research, material properties and behavior, building forensics, and project implementation.

The course will provide an introductory survey of the materials, finishes, and systems frequently found in existing American buildings and the criteria that are frequently applied to assessment and treatment. Architectural, engineering, art, science, and conservation studies are not prerequisites.

Learning Objectives

By the end of this course, students will be able to:

- 1. List the material types commonly used in existing buildings in the United States.
- 2. Recognize and name the common types pathology of commonly used material types in the United States.
- 3. Select appropriate criteria for the treatment of common types of pathology of commonly used material types in the United States.
- 4. Recommend treatments for common types of pathology of commonly used material types in the United States.
- 5. Plan a field survey of material in an existing building.
- 6. Record materials and conditions in an existing building.
- 7. Write a report of materials and conditions and make recommendations for treatment for an existing building.

8. Present orally a clear and succinct assessment and recommendations for treatment for materials for an existing building.

The objectives are measured by quizzes during class, a mid-term oral presentation and written report, and a final oral presentation and written report.

Prerequisite(s): None Co-Requisite(s): None

Concurrent Enrollment: None

Recommended Preparation: Arch 549

Course Notes

Grading Type: normal. One or more classes will be conducted off campus. Off campus meetings are described in the syllabus. Course assignments include independent research and field study of a case study building. The case study location is described below.

There will be guest lecturers who specialize in different disciplines. A revised course schedule may be issued because guest lecturers' schedules sometimes change. Students must provide their own transportation to off-campus classes. Public transportation from campus to the off-campus classes is available. The off-campus classes are scheduled to coincide with regular class time; however, If it should happen due to unforeseen circumstances that there is a class meeting on days and times other than class time, reasonable efforts will be made to accommodate all students' availability.

The Instructor is a part-time Adjunct Professor. The instructor is not normally on campus except for class days. Please use the telephone or E-mail contacts above at any time. The Instructor is normally available for short conferences after class, or longer conferences after class by appointment at other days and times, and via USC Zoom. Discussion of class topics and topics of interest is encouraged.

Technological Proficiency and Hardware/Software Required; USC Resources

Students are required to have a laptop or other device in the classroom that can be used to check-in attendance, take quizzes, and use Brightspace (https://brightspace.usc.edu), which is essential for participation in the class. The case study assignment requires use of MS Word, producing digital photography in the field, and simple handling of digital image files in MS Word documents.

USC support includes <u>USC Computing Center Laptop Loaner Program</u>. USC Technology Support Links: <u>Zoom information for students</u>, <u>Brightspace help for students</u>, <u>Software available to USC Campus</u>.]

Required Readings and Supplementary Materials

The required reading for the course is Robert Young's <u>Historic Preservation Technology</u> (New York, John Wiley & Sons). In general, other required reading assignments, supplemental reading recommendations, and resource material and links to material are provided on Brightspace. Communications outside of the classroom will be distributed to all students using Brightspace and/or e-mailed to the address all registered students at their "*@usc.edu" address. USC requires faculty to use USC e-mail for USC-related communications in order to maintain as high a level of online security as possible.

Optional Readings and Supplementary Materials

Optional readings and supplementary materials are provided as readable and downloadable files or links in Brightspace. Some additional resources provided by guest lecturers are downloadable files or links in Brightspace. The Syllabus specifies which readings are required as preparation for classroom lectures and discussion. Quizzes administered in the classroom are based on required readings, not optional readings and supplementary materials.

Description and Assessment of Assignments

Refer to Course Schedule below.

Participation

Credit for participation is 5% of the grade.

Grading Breakdown

Table 1 Grading Breakdown

Assignment	Points ¹	% of Grade
Participation during class; communications and discussion outside of class hours.	100	5
Quizzes	100	15
Field work for reports	100	15
Midterm oral & report	100	30
Final oral	100	5
Final report	100	30
TOTAL	600	100

Grading Scale

Course final grades will be determined using the following scale:

Table 2 Course Grading Scale

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Letter grade	Corresponding numerical point			
	range			
Α	95-100			
A-	90-94			
B+	87-89			
В	83-86			
B-	80-82			
C+	77-79			
С	73-76			
C-	70-72			
D+	67-69			
D	63-66			
D-	60-62			
F	59 and below			

Assignment Submission Policy

Quizzes are given digitally during class and graded upon completion. Other assignment submission requirements are included in a separate assignment document.

Grading Timeline

Quizzes are graded online upon submission of the work in class. Midterm and final assignments are graded approximately two weeks following turn in, or according to USC requirements for final course grades. Feedback is provided concurrently in class, redlines on work turned in, and verbally in private conferences requested by student or instructor.

¹ Points are weighted to the % that the assignment item contributes to the final grade.

Attendance

- 1. This is not a virtual or hybrid course. Attendance in person is required. Audio and video for remote viewing and participation in the class is not provided. There are no audio and video recordings of the class. Asynchronous participation is not possible.
- 2. No portion of the grade may be awarded for class attendance, but non-attendance can be the basis for lowering the grade.
- 3. Alternative course work can be provided for absence if there is advance notice in writing of religious observation. Alternative course work expectations for excused absences are the time equivalent of a class period (2:50 hours). Students must schedule a make-up tutorial with the Instructor, and complete a make-up quiz prior to the tutorial if a quiz is missed due to non-attendance. Alternative course work is only available for excused absences.
- 4. A student may miss one class session without explanation (i.e., the equivalent of one week of class sessions) without directly affecting the student's grade and ability to complete the course.
- 5. If additional absences are required for a personal illness/family emergency, preapproved academic reason/religious observance, the situation should be discussed with the instructor, who will evaluate it with the Director on a case-by-case basis. Excused absence for personal illness/family emergency will require for the record a written explanation from an MD or a written note from the instructor.
- 6. For each unapproved absence over one class session, the student's letter grade will be lowered by one letter grade (e.g., from "A" to "B").
- 7. Any student who is late for the first 1/3 of the class, is absent for any 1/3 of the class, asleep or technologically distracted for any 1/3 of the class, will be marked fully absent. This includes leaving class early for 1/3 or more of the class. Even if a student is present and checks in digitally on Brightspace, the instructor may mark the student absent, with explanation, on the record if the applicable activity applies.
- 8. Being absent on the day a project, quiz, paper, or exam is due can lead to an "F" for that assignment, unless the instructor pre-approves the absence in evaluation with the Director on a case-by-case basis.
- Being absent for mid-term or final reviews, and missing the opportunity to present, is equal to
 missing a final exam. Due to the course schedule, semester schedule, and grade submission
 deadlines, it is not always possible to reschedule missed presentations.
- 10. Late turn-ins of the final paper will affect the assignment grade, and could result in an "F" for that assignment because the instructor is required to submit a final grade for the course within a specified time of the submission of the final paper.
- 11. Attendance will be taken and recorded on the Brightspace student check-in system. An attendance "PIN" number will be provided in the classroom before the start of class. Therefore, if a student who is not present in the classroom checks-in digitally using a PIN number, that student will be marked absent for that class, and the circumstances will be noted in the digital system.

Classroom norms

Refer to https://cet.usc.edu/teaching-resources/foundations-of-academic-dialogue-part-1, and other resources provided by CET for consideration of discussions during class time.

Zoom etiquette

Zoom is not used for classroom lectures. If the student and instructor meet outside of class via Zoom, both shall use a virtual background, and both may choose to have the video/camera "on" or "off" during the conference.

Academic Integrity

The University of Southern California is foremost a learning community committed to fostering successful scholars and researchers dedicated to the pursuit of knowledge and the transmission of ideas. Academic

misconduct is in contrast to the university's mission to educate students through a broad array of first-rank academic, professional, and extracurricular programs and includes any act of dishonesty in the submission of academic work (either in draft or final form).

This course will follow the expectations for academic integrity as stated in the <u>USC Student Handbook</u>. All students are expected to submit assignments that are original work and prepared specifically for the course/section in this academic term. You may not submit work written by others or "recycle" work prepared for other courses without obtaining written permission from the instructor(s). Students suspected of engaging in academic misconduct will be reported to the Office of Academic Integrity.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

Academic dishonesty has a far-reaching impact and is considered a serious offense against the university. Violations will result in a grade penalty, such as a failing grade on the assignment or in the course, and disciplinary action from the university itself, such as suspension or even expulsion.

For more information about academic integrity see the <u>student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Please ask the instructor if you are unsure what constitutes unauthorized assistance on an exam or assignment or what information requires citation and/or attribution.

Other violations of academic misconduct include, but are not limited to, cheating, plagiarism, fabrication (e.g., falsifying data), knowingly assisting others in acts of academic dishonesty, and any act that gains or is intended to gain an unfair academic advantage.

The impact of academic dishonesty is far-reaching and is considered a serious offense against the university and could result in outcomes such as failure on the assignment, failure in the course, suspension, or even expulsion from the university.

For more information about academic integrity see the <u>student handbook</u> or the <u>Office of Academic Integrity's website</u>, and university policies on <u>Research and Scholarship Misconduct</u>.

Policy for the use of AI Generators Sample Option A-not permitted

This course aims to develop creative, analytical, and critical thinking skills. Therefore, all assignments should be prepared by the student working individually or in groups. Students may not have another person or entity complete any substantive portion of the assignment. Developing strong competencies in these areas will prepare you for a competitive workplace. Therefore, using Al-generated text, code, or other content is prohibited in this course, will be identified as plagiarism, and will be reported to the Office of Academic Integrity.

Please ask me if you are unsure about what constitutes unauthorized assistance on an exam or assignment, or what information requires citation and/or attribution.

Collaboration. In this class, you are expected to submit work that demonstrates your individual mastery of the course concepts.

Group work. Unless specifically designated as a 'group project,' all assignments are expected to be completed individually.

Computer programs. Plagiarism includes the submission of code written by, or otherwise obtained from someone else.]

Course Content Distribution and Synchronous Session Recordings Policies

USC has policies that prohibit recording and distribution of any synchronous and asynchronous course content outside of the learning environment:

Recording a university class without the express permission of the instructor and announcement to the class, or unless conducted pursuant to an Office of Student Accessibility Services (OSAS) accommodation. Recording can inhibit free discussion in the future, and thus infringe on the academic freedom of other students as well as the instructor. (Living our Unifying Values: The USC Student Handbook, page 13).

Distribution or use of notes, recordings, exams, or other intellectual property, based on university classes or lectures without the express permission of the instructor for purposes other than individual or group study. This includes but is not limited to providing materials for distribution by services publishing course materials. This restriction on unauthorized use also applies to all information, which had been distributed to students or in any way had been displayed for use in relationship to the class, whether obtained in class, via email, on the internet, or via any other media. (<u>Living our Unifying Values: The USC Student Handbook</u>, page 13).

Course Evaluations

Course evaluation occurs at the end of the semester university-wide. It is an important review of students' experience in the class. The process and intent of the end-of-semester evaluation should be provided. In addition, a <u>mid-semester evaluation</u> may be provided by USC for early course correction.

	Date	Weekly topics may change before start of classes, and during the semester. Students will be notified in advance of all changes. Table 3 Course Schedule Topics/Daily Activities	Assigned Reading and Homework Refer to "Content" on Brightspace for supplemental reading & resources	Deliverable / Due Dates
1	Jan 15	Introduction to Architectural Conservation: A. Syllabus & course organization B. Class text C. References and resources D. Standards & Criteria (Secretary of the Interior's Standards; AIC Ethics, Alois Riegl) E. Learning about a building's history and condition by close examination in the field: 321 W. Chapman Ave., City of Orange F. Complex building, program, systems, and materials: two rehabilitation projects at Grauman's Egyptian Theatre (1922), Hollywood, Los Angeles, for the American Cinematheque, and subsequently for Netflix	Textbook: Robert A. Young, Historic Preservation Technology (New York, John Wiley & Sons, 2008). Assigned reading for Week 1 may be completed by Week 2 class. A. Standards for Rehabilitation & Guidelines for Rehabilitation Historic Buildings (36 CFR 68: a portion of the Secretary of the Interior's Standards for the Treatment of Historic Properties) B. Preservation Brief 35, Understanding Old Buildings: The Process of Architectural Investigation C. The Secretary of the Interior's Standards for the Treatment of Historic Properties: A Philosophical and Ethical Framework for Making Treatment Decisions D. ASTM E2018-99, Standard Guide for Property Condition Assessment Process E. Preservation Brief 43, Preparation of Historic Structure Reports F. Young, Chapter 1, Overview, pp. 1-16; Chapter 3, Building Pathology: Investigation, Analysis, and Assessment, pp. 31-44; Appendix A, Secretary of the Interior's Standards for the Treatment of Historic Properties, pp. 403-414.	ASSIGNED READING TO BE COMPLETED BY JAN 27.

2	Jan 22	Wood	A. Young, Chapter 4, Wood, pp. 47- 77; Chapter 9, Exterior Wall Cladding, pp. 175-180. B. Preservation Brief 9, The Repair of Historic Wooden Windows C. Preservation Brief 19, The Repair and Replacement of Historic Wooden Shingle Roofs QUIZ ON ASSIGNED READING DURING CLASS
3	Jan 29	Plaster	 A. Young, Chapter 17, Decorative and Flat Plaster, p. 319-332. B. Preservation Brief 21, Repairing Historic Flat Plaster Walls and Ceilings: uploaded to Brightspace C. Preservation Brief 22, The Preservation and Repair of Historic Stucco – uploaded to Brightspace D. Preservation Brief 23, Preserving Historic Ornamental Plaster – uploaded to Brightspace
4	Feb 5	Introduction to course assignment: Site visit to (TBA) Assessment and recommendations for a historic building that will be identified prior to the start of class.	A. Study information on the property has been uploaded to Brightspace. B. Course assignment will be available on Brightspace in the Assignment folder, and will be introduced and discussed during class. C. Course assignment; Individual student topic assignments
5	Feb 12	Metals Architectural metals and their characteristics and applications; galvanic action (problems; protection); special finishes. Young, Chapter 7, Architectural Metals, pp. 131-152; Chapter 9, pp. 184-187.	A. Young, Chapter 7, Architectural Metals, pp. 131-152; Chapter 9, pp. 184-187. At Brightspace: B. Metals in America's Historic Buildings, Uses and Preservation Treatments, pp. 134-139. C. Sembrat, Rabinowitz and Bello, "Investigating and Restoring Decorative Finishes on Architectural Metals," Journal of Architectural Conservation, November 2012, pp. 27-52.

6	Feb 19	Paint and Coatings The Martin Eli Weil Memorial Lecture Introduction to the material, applications in structures, pathology, and treatment in a historic building context.	 A. Young, Chapter 14, Walls and Ceilings, pp. B. 271-287; Chapter 18, Protective and Decorative Finishes, pp.333-350 C. Preservation Brief 10, Exterior Paint Problems on Historic Woodwork D. Preservation Brief 37, Reducing Lead-Paint Hazards in Historic Buildings 	QUIZ ON ASSIGNED READING DURING CLASS
7	Feb 26	Guest lecturer: Eric Doehne, Ph.D., Visiting Lecturer in Art Conservation, Scripps College; Chaire Internationale at the University of Cergy Pontoise; http://conservationSciences/Welcome.html	Young, Chapter 5, Masonry, pp. 82-88.	ASSIGNED READING; NO QUIZ
8	Mar 5	Structural engineering for historic buildings Guest lecturer: David Cocke, S.E., Principal, Structural Focus http://structuralfocus.com/ Los Angeles, will describe the distinctions in engineering for historic structures with respect to both technique and cultural value criteria.	At Brightspace, under Content, in Structural Engineering: preview of a previous lecture.	ASSIGNED READING; NO QUIZ
9	Mar 12	Mid-term paper	Oral presentation and submission of mid-term paper by each student, individually, for class project assignment.	MID-TERM PAPER & ORAL PRESENTATION
10	Mar 19	Spring Recess	No assignments	NONE
11	Mar 26	Workday at the course assignment property. Site visit to (TBA) Observation of spaces, materials, and features that are assigned for study by	Course assignment Individual student topic assignments	PREPARE QUESTIONS & CONCERNS REGARDING SITE CONDITIONS

		the students for midterm and final papers; focus on conditions.		
12	Apr 2	Ceramics: brick, tile, architectural terra cotta Co-lecturer: David Charlebois, California Restoration & Waterproofing, a top qualified restoration contractor, and masonry restoration expert.	 A. Young, Chapter 5, pp. 79-82, 88-113; Chapter 9, Exterior Wall Cladding, pp.180-184 B. Preservation Brief 2, Repointing Mortar Joints in Historic Brick Buildings C. Preservation Brief 7, The Preservation of Historic Glazed Architectural Terra-Cotta D. Preservation Brief 40, Preserving Historic Ceramic Tile Floors 	QUIZ ON ASSIGNED READING DURING CLASS
13	Apr 9	Architectural conservation as practice and profession & role in the heritage architecture team Classroom lecture by architectural conservator in private practice Guest lecturer: Christina Varvi, President, RLA Conservation, Los Angeles & Miami. A seminal practice in Los Angeles that works nationally internationally will present the role of conservators and case studies.	https://rlaconservation.com/	ASSIGNED READING; NO QUIZ
14	Apr 16	Concrete Introduction to the material, applications in structures, pathology, and treatment in a historic building context.	 A. Young, Chapter 6, Concrete, pp. 115-130 B. Preservation Brief 15, Preservation of Historic Concrete: Problems and General Approaches 	QUIZ ON ASSIGNED READING DURING CLASS

15	Apr 23	Field visit: Conserving Buildings and Collections Madeline Corona, Associate Conservator, Decorative Arts and Sculpture Conservation Department, J. Paul Getty Museum	Buildings as containers for collections; exhibiting, interpreting, and preserving collections; methods and materials, preventive care, innovations in treatments, mountmaking. This is not the "GCI," (Getty Conservation Institute. The Museum collaborates with GCI, but the conservation departments are part of the Museum.	ASSIGNED READING; NO QUIZ
16	Apr 30	9:00 – 10:30 a. Workshop: questions on final report assignment b. Heating, air-conditioning, electrical, plumbing, fire suppression, related building envelope 10:30 – 11:50 a. Field trip: walking tour of campus for observation of materials, conditions, and other issues	A. Review course assignment for (TBA) B. Prepare questions on your final report	Q & A IN PREPRATION FOR FINAL ORAL AND REPORT SUBMISSIONS; NO QUIZ
17	May 7 (may be changed based on detailed USC Arch exam schedule	Course Assignment Final Paper Due at 9:00 AM. Final Oral Presentation during class.	Students will deliver final reports at the beginning of class time as digital files by TURNITIN. The same reports will be used for the final oral presentation.	FINAL PAPER & ORAL PRESENTATION

Statement on University Academic and Support Systems

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University's educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Student Financial Aid and Satisfactory Academic Progress:

To be eligible for certain kinds of financial aid, students are required to maintain Satisfactory Academic Progress (SAP) toward their degree objectives. Visit the <u>Financial Aid Office webpage</u> for <u>undergraduate</u> and <u>graduate-level</u> SAP eligibility requirements and the appeals process.

Support Systems:

Counseling and Mental Health - (213) 740-9355 - 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

988 Suicide and Crisis Lifeline - 988 for both calls and text messages – 24/7 on call

The 988 Suicide and Crisis Lifeline (formerly known as the National Suicide Prevention Lifeline) provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week, across the United States. The Lifeline consists of a national network of over 200 local crisis centers, combining custom local care and resources with national standards and best practices. The new, shorter phone number makes it easier for people to remember and access mental health crisis services (though the previous 1 (800) 273-8255 number will continue to function indefinitely) and represents a continued commitment to those in crisis.

<u>Relationship and Sexual Violence Prevention Services (RSVP)</u> - (213) 740-9355(WELL) – 24/7 on call Free and confidential therapy services, workshops, and training for situations related to gender- and power-based harm (including sexual assault, intimate partner violence, and stalking).

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-2500

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 740-0411

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 - 24/7 on call

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

<u>USC Department of Public Safety</u> - UPC: (213) 740-6000, HSC: (323) 442-1200 – 24/7 on call Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-2850 or otfp@med.usc.edu

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance. y of life and academic performance.