University of Pennsylvania, Weitzman School of Design
Graduate Department in Historic Preservation
Lecturer: Cassie Myers
202-422-5040
csmyers@mac.com; myerscas@upenn.edu

HSPV 740-301 Conservation Seminar: Architectural Surface Finishes
Spring 2026
Van Pelt Library Seminar Room 242
Tuesdays 3:30-6:30

Course Description

Architectural surface finishes are among the most ephemeral of all materials in the built environment. Enduring harsh conditions and subject to frequent change, they are intrinsically vulnerable and, as a result, are often replaced or disappear entirely. Yet, despite their changeability, finishes are extraordinarily important. They offer insight into architectural alterations and conditions. They imbue buildings with meaning, influence the perception and expression of design, and the effect color and light. Finishes ornament, imitate, and fool the eye. They function as disinfectants, insecticides, and water- proofing. They are reflections of economies, trade, and natural resources. They demonstrate people's mythologies, beliefs, aesthetics, and aspirations. Because architectural surface finishes encompass a wide range of material types and possibilities for conservation intervention, approaches to their treatment vary widely. On the one hand, in a departure from pure conservation convention, they are commonly replicated. On the other hand, treatments may rise to the same level as that of murals or painted sculpture. These differences in levels of approach call on conservation principles and charters for guidance, while sometimes stirring debate and igniting controversies on questions of consistency, original fabric, and authenticity. Over the course of the semester by way of lectures, lab exercises, demonstrations and a case study, students will gain understanding of the history, materials, craft and technology of which architectural finishes in the west have been most commonly made, in addition to sources for researching them, the types and causes of deterioration and treatment. One class will also address historic plaster. Lectures on history and technology by the instructor will be complemented by guest lectures. We will also learn from each other in discussion. This is an interactive class. Students will be expected to actively participate in discussions and activities. In-class exercises and assignments will help build skills and knowledge of historic finishes. Discussions and assigned reporting on readings will occur at the beginning of many of the classes. Quizzes will reinforce important knowledge. Short assignments and laboratory exercise will precede case study assignments, one at the Episcopal Church of St Thomas (ca. 1900) in the Overbrook section of Philadelphia; and the other at Ivy Lodge, the 1852 historic house in Germantown. Working as a group on site and in the lab, students will report on the microscopic analysis of finishes and relate findings to paint technology and style of the period, finishes of similar buildings of the period; and changes to the building. They will present their finding to the "client" and others in the final class. Students will be responsible for transportation to and from the site for the two site visits. By the end of the seminar, students will have gained the following knowledge and skills: general understanding of the history of finishes and knowledge of related research; general understanding of the chemistry, technology, appearance and performance of historic finishes; knowledge of historic plasters; knowledge of analytical protocols and needs for specialist consultation; ability to organize, plan and execute a finishes analysis; ability to adopt flexible approaches and demonstrate self-direction for solving problems; and a genersl understanding of best practices for conservation project management and intervention based on principles and ethics of the conservation profession. Prerequisites: Conservation Science HSPV 555. Exceptions will be considered and granted as possible by permit from the department.

Materials Collection Inventory: www.acl.design.upenn.edu

Cassie Myers (she/ her) is a conservator of mural paintings and architectural finishes in private practice in Philadelphia. In addition to conservation treatment commissions, she conducts finishes analyses and advises clients on conservation planning and preservation policy development. First educated in Art History and then as a fine arts conservator in the United States, where she worked in museums (North Carolina Museum of Art, Isabella Stew art Gardner and the Brooklyn Museum) she went on to study in Italy by way of fellowship sponsorship (Samuel H. Kress Foundation Fellowship and UNESCO Fellowship at ICCROM and L'Istituto Centrale per Restauro and in the field) before returning to the US and fine arts conservation positions. At mid-career, she expanded her expertise through studies in Historic Preservation and Architectural Conservation (HSPV, Penn 1992). She has held positions in museums, the private sector, the federal government (GSA, Central Office, Washington, DC), and at a research institution (Getty Conservation Institute). In more than 25 years of private practice, she has carried out commissions and advised clients at museums, on-profit organizations, the federal government, local and state municipalities and private owners.

University of Pennsylvania, Weitzman School of Design
Graduate Department in Historic Preservation
Lecturer: Cassie Myers
202-422-5040
csmyers@mac.com; myerscas@upenn.edu

This schedule and content following Spring Break may be slightly modified

Schedule

Date	Subject	Format, Location, Schedule
Class 1 January 20	***Introduction*** Review of course structure, content, assignments, grading, case studies. History of architectural finishes. Function. Color and contextual significance. Materials and technology of finishes 1 Primary sources- historic handbooks, treatises, and promotion materials	Lecture. Van Pelt Library 3:30-5:00pm Special Collections at Fisher Fine Arts Library 5pm-6:30pm
Class 2 January 27	***Materials and Technology*** Materials and technology of finishes 2. Media and Pigments. Clear Coatings. Chemical and physical properties. Solubilities Making Finishes- materials, mixing and applying	Lecture. Van Pelt Library 3:30-4:30 Lab- Review of materials collections and supplies. Pigment and media preparation 4:30-6:30
Class 3 February 3	***Materials and Technology*** Making paints and other finishes. Mixing and painting oil paints and distempers. Gilding, Stencil making. Faux finishes	Lab Only 3:30-6:30
Class 4 Feb. 10	***Materials and Technology*** Substrates and Plasters. Types of substrates, properties, and associated sizing. Plasters. Gypsum vs. lime. Plain plaster, run, and cast plaster. *Quiz: Finishes Compositions* Making plasters	Lectures: Van Pelt Library 3:30-5pm . Lab: Plaster application and casting. 5-6:30pm
Class 5 February 20	***Scientific Analysis*** Review of Microscopy. Microscopical analysis of cross-sectional samples and dispersion. Polarizing light microscopy. Microchemical spot testing. Fluorescence Microscopy 1 *Quiz: Substrates* Lab	Lecture. Van Pelt. 3:30-5:30pm . Fluorescence Microscopy 1. 5:30-6:30pm
Class 6 February 24	***Application*** Site Visit. Case study 1. The African Episcopal Church of St Thomas, 6361 Lancaster Avenue, Overbrook.Overview of history of church- Bill Burke. Conservation treatment in progress. Review of conditions. Tracing stencils	Site Visit. 3:30-6:30pm
Class 7 March 10	***Scientific Analysis*** Sample preparation. Hands on sample preparation. Students will rotate around stations in the lab to gain hands-on experience in each phase of sample preparation, including sample taking, embedding, cutting, polishing AND pigment extraction, preparation of pigment dispersions.	Lab only. 3:30-6:30pm
Class 8 March 17	***Scientific Analysis*** Fluorescence Microscopy 2. Reading Stratigraphies. *Quiz: Microscopy*	Lecture: Van Pelt Library 3:30-5pm Lab 5-6:30pm

University of Pennsylvania, Weitzman School of Design
Graduate Department in Historic Preservation
Lecturer: Cassie Myers
202-422-5040
csmyers@mac.com; myerscas@upenn.edu

	Examining cross sections in visible light and ultra-violet/visible.	
Class 9 March 24	***Application*** Site visit:. Case study 2. Ivy Lodge, 29 East Penn St., Germantown, Philadelphia Building technology. Examination of conditions. Causes of deterioration. Sampling of Library finishes.	Site visit 3:30-6:30
Class 10 March 31	***Scientific Analysis*** Color Theory and color measurement. Case studies. *Quiz: Analysis and Outcome* Color matching with Munsell and with spectrophotometer	Lecture: Van Pelt Library 3:30-5pm Lab 5-6:30pm
Class 11 April 7	***Diagnostics. Treatment*** Diagnostics and Conservation Treatment: Case Studies. Myers and guest lecturer Franny Hutchings (HSPV 2025) *Quiz: Color Theory*	Lecture: Van Pelt Library 3:30-6:30
Class 12 April 14	***Scientific Analysis*** Instrumental Analysis. Guest Lecturer; Catherine Matsen, University of Delaware	Lecture: Van Pelt Library 3:30-6:30
Class 13 April 21	***Treatment*** Types of treatment. Theoretical framework. Project Management *Quiz: Treatment Approaches* Treatment testing: consolidation and cleaning	Lecture and Discussion: Van Pelt 3:30-5pm Lab 5-6:30pm
Class 14 April 30	***Student Presentations*** St Thomas Church: Case Study 1; Ivy Lodge: Case Studies	Van Pelt Library 3:30-6:30

Grades

Participation, collaboration, engagement	**25%**
Quizzes	**25%**
Assignment/Labs	**25%**
Case Study Projects	**25%**

Class Policies

Please be seated and prepared to begin class at promptly at 3:30pm. With exception only by special permission, screens of any sort will not be allowed in class. Be prepared to take notes by hand in a notebook. Please have drawing tools (pencil at minimum). Students must abide by laboratory and safety regulations both inside and outside of class time.

Penn Code of Academic Integrity

Students are discouraged from generative AI (such as tools like Chat-GPT) for your work in this class. Using such tools may be considered a violation of Penn's Code of Academic Integrity. That said, generative AI may be a helpful tool in exploring resources, an exercise in fact checking, or a springboard for deeper research. We will discuss this in class.

University of Pennsylvania, Weitzman School of Design
Graduate Department in Historic Preservation
Lecturer: Cassie Myers
202-422-5040
csmyers@mac.com; myerscas@upenn.edu