# HISTORIC PRESERVATION
# (FA) {HSPV}

**521. American Architecture. (A)** Wunsch.

This course is a survey of architecture in the United States. The organization, while broadly chronological, emphasizes themes around which important scholarship has gathered. The central purpose is to acquaint you with major cultural, economic, technological, and environmental forces that have shaped buildings and settlements in North America for the last 400 years. To that end, we will study a mix of "high-style" and "vernacular" architectures while encouraging you to think critically about these categories. Throughout the semester, you will be asked to grapple with both the content of assigned readings (the subject) and the manner in which authors present their arguments (the method). Louis Sullivan, for instance, gives us the tall office building "artistically considered" while Carol Willis presents it as a financial and legal artifact. What do you make of the difference? Finally, you will learn how to describe buildings. While mastery of architectural vocabulary is a necessary part of that endeavor, it is only a starting point. Rich or "thick" description is more than accurate prose. It is integral to understanding the built environment - indeed, to seeing it at all.

**SM 528. (HIST528) American Vernacular Architecture. (M)** St. George.

This course explores the form and development of America's built landscape-its houses, farm buildings, churches, factories, and fields--as a source of information on folk history, vernacular culture, and architectural practice.

**530. American Domestic Interiors Before 1850. (C)** Winkler.

The American domestic interior from the early British and French settlements in North America until 1850. Emphasis will be on the social, economic, and technological forces as well as the European influences that determined household decoration ranging from the decorative arts to floor, wall, and window treatments.

**531. American Domestic Interiors. (B)** Stutman.

This course will examine the American domestic interior from the seventeenth century through the twentieth century with emphasis on the cultural, economic, and technological forces that determined the decoration and furnishing of the American home. Topics to be covered include the decorative arts; floor, wall and window treatments; and developments in lighting, heating, plumbing, food preparation and service, and communication technologies. In addition to the identification of period forms and materials, the course will give special emphasis to historical finishes. The final project will involve re-creation of an historic interior based on in-depth household inventory analysis and study. Several class periods will be devoted to off-site field trips.

**538. Cultural Landscapes and Landscape Preservation. (M)** Mason.

The course introduces the history and understanding of common American landscapes and surveys the field of cultural landscape studies. Methods of Methods of landscape preservation are also surveyed. The cultural-landscape perspective is a unique lens for understanding the evolution of the built environment, the experience of landscapes, and the abstract economic, political and social processes that shape the places where most Americans spend most of their time. The course will focus on the forces and patterns (natural and cultural) behind the shaping of recognizably "American" landscapes, whether urban, suburban, or rural. Methods for documenting and preserving cultural landscapes will be surveyed. Class discussions, readings, and projects will draw on several disciplines--cultural geography, vernacular architecture, environmental history, historic preservation, ecology, art, and more.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**540. American Building Technology I. (A)** Matero.

Much architectural writing--from Vitruvius to Le Corbusier--has drawn analogous comparisons between buildings and the human body. Like the skeleton, skin, and internal metabolic systems of the human corpus, buildings are comprised of a structure, infrastructure, and outer surface which are all connected and through which liquids, gases and solids pass. Traditionally, form depended in large part on systems of construction and the selection and manipulation of individual materials. Understanding architecture's materiality in terms of form and fabric, structure and skin, and mechanical systems is essential in understanding not only what a building is, but how it evolves over time. American Building Technology will be divided into two discreet six week modules conceived in succession and taught during the second half of the first semester and first half of the second semester respectively. Module 1: Building Anatomy will examine traditional construction methods through a typological analysis of construction systems. Module 2: Building Archaeology will address the morphological evolution of a structure and its its physical setting, sometimes known as "above ground archaeology." Since thephysical fabric and its evidences of cultural alteration present one primary mode of inquiry, archaeological theory and method provide

an excellent means to recover, read, and interpret material evidence, especially in association with documentary and archival sources. The course is intended to introduce students in Historic Preservation to the physical realities of built form and its analysis through careful observation and description. Note: This course continues in the first half of the spring semester for another 0.5 CU.

**541. American Building Technology II: Building Archaeology. (B)** Matero.

Built works- be they barns or bridges, gardens or corn fields, palaces or pit houses - all embody something of their makers and users, and the prevailing social and cultural norms of the day. As a form of material culture, things- buildings and landscapes- are made and modified consciously and unconsciously, reflecting individual and societal forces at play. Since the physical fabric and its alteration present one primary mode of evidence, their investigation provides a critical form of research, especially in association (and often in contest) with archival documentary sources and oral histories. This course will examine the theories and techniques used to investigate the morphological evolution of built works, sometimes known as "above ground archaeology". Students will learn and apply methods relevant to the reading of architectural fabric. Methods of investigation will include absolute and relative dating techniques such as dendrochronology, finishes stratigraphy, mortar analysis, and various typological - seriation studies including framing, molding, fastener (nails and screws), and hardware analyses. Students are expected to use this knowledge in combination with the recording skills of HSPV 601 to record their assigned sites.

**SM 551. Building Pathology. (B)** Henry.Prerequisite(s): HSPV 555 or one technical course in architecture.

This course addresses the subject of deterioration of buildings, their materials, assemblies and systems, with the emphasis on the technical aspects of the mechanisms of deterioration and their enabling factors, material durability and longevity of assemblies. Details of construction and assemblies are analyzed relative to functional and performance characteristics. Lectures cover: concepts in durability; climate; psychrometric, soils & hydrologic; conditions; physics of moisture in buildings; enclosure, wall and roof systems; structural systems; and building services systems with attention to performance, deterioration, and approaches to evaluation of remedial interventions.

**SM 555. Conservation Science. (B)** Matero. $30 Lab Fee

This course provides an introduction to architectural conservation and the technical study of traditional building materials. Lectures and accompanying laboratory sessions introduce the nature and composition of these materials, their properties, and mechanisms of deterioration, and the general laboratory skills necessary for field and laboratory characterization. Knowledge of basic college level chemistry is required.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**552. Building Diagnostics and Monitoring. (A)** Henry.

Building diagnostics pertain to the determination of the nature of a building's condition or performance and the identification of the corresponding causative pathologies by a careful observation and investigation of its history, context and use, resulting in a formal opinion by the professional. Monitoring, a building diagnostic tool, is the consistent observation and recordation of a selected condition or attribute, by qualitative and/or quantitative measures over a period of time in order to generate useful information or data for analysis and presentation. Building diagnostics and monitoring allow the building professional to identify the causes and enabling factors of past or potential pathologies in a building and building systems, thus informing the development appropriate interventions or corrective measures. In the case of heritage buildings, the process informs the selection of interventions that satisfy the stewardship goals for the cultural resource. In the case of recently constructed buildings, the process informs the identification of envelope and systems interventions for improved performance and energy efficiency.

**556. Documentation and Conservation of the Historic Landscape. (M)** Staff.

"Landscape conservation" is a growing concern in contemporary preservation circles. It is a multi-faceted issue, drawing on the fields of landscape architecture, horticulture, architectural history, regional planning, and archaeology. This course aims to provide a comprehensive overview, a look at the state-of-the-art, including philosophical issues, attempts at international and national guidelines, evaluative/survey systems, technical investigation techniques, and selected case studies. Students will be asked to analyze and develop a preliminary conservation plan for a selected site in the Philadelphia area.

**572. Preservation Through Public Policy. (B)** Hollenberg.

This course explores the intersection between historic preservation, design and public policy, as it exists and as it is evolving. That exploration is based on the recognition that a network of law and policy at the federal, state and local level has profound impact on the ability to manage cultural resources, and that the pieces of that network, while interconnected, are not necessarily mutually supportive. The fundamental assumption of the course is is that the preservation professional must understand the capabilities, deficiencies, and ongoing evolution of this network in order to be effective. The course will look at a range of relevant and exemplary laws and policies existing at all levels of government, examining them through case studies and in-depth analyses of pertinent programs and agencies at the local, state and federal level.

**600. Documentation, Research, Recording 1. (A)** Wunsch.

The goal of this class is to help students develop their understanding and utilization of materials that contextualize the history of buildings and sites. In order to gain first-hand exposure to the actual materials of building histories, we will visit a half-dozen key archival repositories. Students will work directly with historical evidence-both textual and graphic-and exercise their facility through projects. We will explore various forms of documentation, discussing each in terms of its nature, the motives for its creation, and some ways it might find effective use. Philadelphia is more our laboratory than a primary focus in terms of content, as the city is rich in institutions that hold over three centuries of such materials; students will find here both an exposure to primary documents of most of the types they might find elsewhere, as well as a sense of the culture of such institutions and of the kinds of research strategies that can be most effective.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**601. Documentation, Research, Recording II. (B)** Matero/Mason/Faculty.

Documentation, Research, Recording II. This course provides an introduction to the survey and recording of historic buildings and sites. Techniques of recording include traditional as well as digitally-based methods including field survey, measured drawings, photography and rectified photography. Emphasis is placed on the use of appropriate recording tools in the context of a thorough understanding of the historical significance, form and function of sites. Required for first-year MSHP students; others by permission.

**606. Historic Site Management. (B)** Faculty.

The course focuses on management, planning, and decision-making for all types of heritage sites from individual buildings to historic sites to whole landscapes. Course material will draw on model approaches to management, as well as a series of domestic and international case studies, with the goal of understanding the practicalities of site management. Particular topics to be examined in greater detail might include conservation policy, interpretation, tourism, or economic development strategies.

**SM 620. (LARP770) Seminar in American Architecture. (B)** Wunsch.

Architectures of Commerce: Buildings and Landscapes of American Retail from the Colonial Era to the Present. Merchants and the "world of goods" have left an indelible mark on America's neighborhoods, cities, and regions. We will examine the structures and spaces in which commercial activities occurred- an excursion running the gamut from counting houses to warehouses, from pushcarts to mini-malls. Studying these buildings as distinctive types, we will also analyze the roles they have played in the American cultural landscape. Doing so requires forays into urban, economic, and cultural history. Close reading and student-led discussion form the course's backbone.

**SM 637. Landscape Preservation Seminar. (M)** Staff.

The seminar on the Common American Landscape concentrates on a selected topic which illuminates a typical land/or significant aspect of the American landscape in a particular time and place.

**SM 621. Urban Conservation Seminar. (B)** Mason.

Urban Conservation Seminar: Heritage and Urbanism in China. This seminar covers basic concepts, tools, history, theory and case studies in urban conservation-a specialist area of preservation bringing to bear aspects of urban history, planning, design, development, policy and governance. The course will compare and contrast the experiences of European cities, where urban conservation has developed over centuries, and Asian cities that have been experiencing explosive growth and and are informed by quite differenttheories of urbanism and heritage. A series of lectures, intensive readings, case studies, small writing projects and guest presentations will build familiarity with the breadth of practices nationally and internationally. The second half of the semester will include intensive project (over spring break and the second half of the term) studying urban conservation issues, histories and opportunities in one or two cities (yet to be determined).

**624. Digital Media for Historic Preservation. (A)** Hinchman.

A required praxis course designed to introduce students to the techniques and application of digital media for visual and textual communication. Techniques will be discussed for preservation use including survey, documentation, relational databases, and digital imaging and modeling.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**625. Preservation Economics. (B)** Rypkema.

The primary objective is to prepare the student, as a practicing preservationist, to understand the language of the development community, to make the case through feasibility analysis why a preservation project should be undertaken, and to be able to quantify the need for public/non-profit intervention in the development process. A second objective is to acquaint the student with the measurements of the economic impact of historic preservation and to critically evaluate "economic hardship" claims made to regulatory bodies by private owners.

**SM 638. (MUSC621) Topics in Historic Preservation. (B)** HSPV Faculty.

Spring 2016: This seminar will examine the role of sound in shaping modern urban spaces and life. While music plays a large part in the sounds of the city, we will focus on soundscapes more broadly. From the late 19th century through the present, and in geographies spanning from Paris to Philadelphia, we will explore the making, meaning, and experience of sound for varied populations; the politics of sound as an instrument of power; and the policies of noise regulation. As an interdisciplinary seminar supported by the Mellon Humanities+Urbanism+Design Initiative, the course will bring together students and faculty from diverse fields to probe the subject of urban sound through the lenses of both theory and practice. We will read across a wide variety of disciplines, including urban and environmental history, sound studies, urban geography, the history of sensation, musicology, anthropology and critical theory. We will engage with sound archives, installations, films, and photographs, and also have an opportunity to make field recordings of our own. The format of the final project is flexible and could include a research paper, theoretical essay, visualizations, GIS mapping, sonic compositions, short film, or other types of media. Instructors: Francesca Ammon and Naomi Waltham-Smith.

**SM 640. Contemporary Design in Historic Settings. (A)** Hawkes.

Thoughtful contemporary design can add value and meaning to historic settings of any scale. Rigorous dialogue with history and context enriches contemporary design. This seminar immerses students in the rewarding yet challenging realm of design with landmarks and existing structures. It will encourage participants to create their own models for design and preservation planning through discussion of source materials that illustrate the political, cultural and aesthetic environments that have shaped regulation and design with heritage throughout the past century. Sketch problems set in Philadelphia and analysis of case studies from around the world will enable students to critique and communicate a range of responses to landmarks and historic contexts, and to explore the roles of significance, physical and intangible conditions in shaping appropriate responses.

**650. European Conservation.** Mason.

A three to four week summer course offered in different locations in Europe to teach international theories and methodologies of conservation as practiced there. Lectures,documentation, field work, and field trips will be involved. Past course locations included Italy, England and Turkey. Travel and residence fees may be extra. Offered every year.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**656. Advanced Conservation Science. (C)** Vatankhah.Prerequisite(s): HSPV 555, Conservation Science or Permission of the Instructor.

A methodological approach to the examination and analysis of historic building materials is introduced. Experimental design for conducting conservation research plus statistical analysis and modeling of research data will further complete the discussion. Practical analytical techniques appropriate for conservation practice including: classical and advanced instrumental techniques for qualitative and quantitative analysis of organic and inorganic materials will be discussed. Theoretical and practical applications of advanced surface techniques for both elemental and molecular/composition analysis as well as applications of nanotechnology and nanomaterials in conservation will be covered. Students will also learn about deterioration processes and long term effects of conservation treatments through accelerated aging techniques. Course materials will be taught through lectures, invited speakers, lab visits and laboratory sessions by practicing learned techniques and procedures on related masonry samples, along with provided course readings and literature.

**701. Historic Preservation Studio. (A)** Mason/Wang/Hawkes.

The studio is a practical course in planning architectural, urban and regional conservation interventions, bringing to bear the wide range of skills and ideas at play in the field of historic preservation. Recognizing that historical areas are complex entities where cultural and socio-economic realities, land use, building types, and the legal and institutional setting are all closely interrelated, the main focus of the studio is understanding the cultural significance of the built environment, and the relation of this significance to other economic, social, political and aesthetic values. Through the documentation and analysis of a selected study area, studio teams undertake planning exercises for an historical area, consult with communities and other stakeholders, carry out documentation and historical research, and create policies and projects. The studio seeks to demonstrate how, through careful evaluation of problems and potentials, preservation planning can respond to common conflicts between the conservation of cultural and architectural values and the pressure of social forces, economic interest,and politics.

The studio focuses on a specific site in need of comprehensive preservation effort, most often in Philadelphia proper. Students work in teams as well as on individual projects. Consultation with local preservation and planning groups, community representatives, and faculty advisors informs research and analyze the study area, helping to define major preservation planning problems and opportunities, formulate policies, and propose preservation plans and actions.

**660. Theories of Historic Preservation. (A)** Mason.Prerequisite(s): Instructor's permission required for any student not registered in the Graduate Program in Historic Preservation.

Theories of historic preservation serve as models for practice, integrating the humanistic, artistic, design, scientific and political understandings of the field. This course examines the historical evolution of historic preservation, reviews theoretical frameworks and issues, and explores current modes of practice. Emphasis is placed on literacy in the standard preservation works and critical assessment of common preservation concepts. In addition to readings and lectures, case studies from contemporary practice will form the basis for short assignments. Professional ethics are reviewed and debated. The instructor's permission is required for any student not registered in the Graduate Program in Historic Preservation. Note that the course is organized in two parts; the first half, on the basics of preservation theory, is taught in the fall semester while the second half takes place in the spring semester and engages advanced topics. Note: this course continues in the second half of the spring semester for another 0.5 CU.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**SM 661. Theories of Historic Preservation II. (B)** Mason.

Theories of historic preservation serve as models for practice, integrating thehumanistic, artistic, design, scientific and political understandings of the field. HSPV 661 builds on HSPV 660, which examines the historical evolution of historic preservation, reviews theoretical frameworks and issues, and explores current modes of practice. HSPV 661 engages advanced topics such as cultural landscape theory, economics of preservation, sustainability and environmental conservation, social justice, and urban design. In addition to readings and lectures, case studies from contemporary practice will be used to examine theories in practice. The principal assignment will be a term research paper. The instructor's permission is required for any student not registered in the Graduate Program in Historic Preservation. (Note that the course is the second of two parts; the first half, on the basics of preservation theory is taught inthe fall semester while the second half takes place in the spring semester.)

**671. Historic Preservation Law. (B)** Michael.

Introduction to the legal framework of urban planning and historic preservation, with special emphasis on key constitutional issues, zoning, historic districts, growth management, and state and local laws for conserving historic buildings.

**SM 703. Topical Studio/Seminar:Urban Regeneration in Quito. (B)** Rojas.

This 1-CU course-combining seminar and studio teaching methods-will focus on the opportunities and challenges posed by the sustainable conservation of urban heritage areas with a particular focus in the historic centers of Latin America. Adapting urban heritage sites and buildings for contemporary uses with proven demand is a strategy that is gaining acceptance around the world and is considered more capable of sustaining the conservation of urban heritage than traditional conservation methods based on the strict preservation of the physical characteristics and uses. However, the adaptive rehabilitation of of historic neighborhoods and buildings poses significant conceptual and design challenges.

Class sessions will explore the conceptual problems involved in the adaptive rehabilitation of heritage building and public spaces in historic centers including all historic periods: pre-Columbian, colonial, republican and those from the modern movement. The methodology includes the analysis and discussion of case studies of successful listing and adaptive rehabilitation efforts. The Studio exercise will focus on the practical challenges posed by this approach to heritage conservation in the historic center of Quito in Ecuador, the first urban heritage area included in UNESCO's World Heritage List. The students will work in close cooperation with government officials in Ecuador in charge of managing the historic center.

**710. Thesis I. (A)** Faculty.

Students are admitted to thesis after completion of two semesters or their equivalent in the graduate program. Theses should be based on original researc and relate to each student's elected concentration in history, theory, technology, planning or design. Thesis proposals are required at the time of fall enrollment, and during the fall semester thesis students are required to defend their topics before preservation faculty and students. Thesis guidelines, available in the Historic Preservation office, describe other details.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**SM 740. Conservation Seminar: Wood/Masonry. (B)** Fearon/Ingraffia.Prerequisite(s): HSPV 555 Conservation Science.

Module 1: Masonry - Roy Ingraffia This seminar will offer an in-depth study of the conservation of masonry buildings and monuments with a particular focus on American building stone. Technical and aesthetic issues will be discussed as they pertain to the understanding required for conservation practice. Part 1 will address a broad range of building stone, masonry construction technologies and deterioration phenomenon; Part 2 will concentrate on conservation methodology as well as past and current approaches for the treatment of stone masonry structures. The subject will be examined through published literature and case studies. Students will gain practical experience through lab and field exercises and demonstrations. The subject matter is relevant to interested students of conservation and preservation, architecture, landscape architecture, architectural history, and archaeology.

Module 2: Wood - Andrew Fearon. Prior to the twentieth century, most structures found in the built environment relied upon wood as a primary material for both structural members and decorative features. An understanding of the physical properties as well as the historic application of this organic material provides the basis for formulating solutions for a wide spectrum of conservation issues. As the scope of preserving wooden structures and wooden architectural elements is continually broadened, new methods and technology available to the conservator together allow for an evolving program - one that is dependent upon both consistent review of of treatments and more in depth study of craft traditions. This course seeks to illustrate and address material problems typically encountered by stewards of wooden cultural heritage - among them structural assessment, bio-deterioration, stabilization and replication techniques. Through a series of lectures and hands-on workshops given by representative professionals from the fields of wood science, conservation, entomology, engineering, and archeology, theoretical and practical approaches to retaining wooden materials will be examined with the goal to inform the decision making process of future practicing professionals.

**711. Thesis II. (B)** Faculty.

Students are admitted to thesis after completion of three semesters or their equivalent in the graduate program. Theses should be based on original research and relate to each student's elected concentration in history, theory, technology, planning, or design. Thesis proposals are required at the time of fall enrollment, and during the fall semester thesis students are required to defend their topics before preservation faculty and students. Thesis guidelines, available in the Historic Preservation office, describe other details.

**SM 713. Rural Studio/Seminar. (B)** HSPV Faculty.

The preservation of rural places -- landscapes, villages and towns -- presents a widespread and urgent challenge. Economic restructuring, metropolitan development,and other social forces continue to challenge the integrity and vitality of rural communities and landscapes across the U.S. This seminar/ studio course explores means of activating rural places while retaining their character.Issues of abandonment and underutilization, industrial and agricultural restructuring, environmental conservation, and new economic opportunities will be explored. Tools from historic preservation,land conservation, economic development, community engagement and ecological design will be considered and applied. Research and focused readings will establish key issues, case studies, innovative ideas and institutions; students will create focused proposals for the conservation and redevelopment of a chosen study site in southeastern Pennsylvania.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**SM 739. Conservation Seminar: Masonry/Wood. (A)** Ingraffia/Fearon.

Module 1: Masonry - Roy Ingraffia. This seminar will offer an in-depth study of the conservation of masonry buildings and monuments with a particular focus on American building stone. Technical and aesthetic issues will be discussed as they pertain to the understanding required for conservation practice. Part 1 will address a broad range of building stone, masonry construction technologies, and deterioration phenomenon; Part 2 will concentrate on conservation methodology as well as past and current approaches for the treatment of stone masonry structures. The subject will be examined through published literature and case studies. Students will gain practical experience through lab and field exercises and demonstrations. The subject matter is relevant to interested students of conservation and preservation, architecture, landscape architecture, architectural history, and archaeology.

Module 2: Wood - Andrew Fearon. Prior to the twentieth century, most structures found in the built environment relied upon wood as a primary material for both structural members and decorative features. An understanding of the physical properties as well as the historic application application of this organic material provides the basis for formulating solutions for a wide spectrum of conservation issues. As the scope of preserving wooden structures and wooden architectural elements is continually broadened, new methods and technology available to the conservator together allow for an evolving program - one that is dependent upon both consistent review of treatments and more in depth study of craft traditions. This course seeks to illustrate and address material problems typically encountered by stewards of wooden cultural heritage -among them structural assessment, bio-deterioration, stabilization and replication techniques. Through a series of lectures and hands-on workshops given by representative professionals from the fields of wood science, conservation, entomology, engineering, and archeology, theoretical and practical approaches to retaining wooden materials will be examined with the goal to inform the decision making process of future practicing professionals.

**748. Preservation Case Studies: Advanced Theory. (A)** Mason.

Preservation Case Studies will bring cutting-edge theoretical debates, current issues and the latest work of faculty and guests into the HSPV curriculum. Coordinated by the Chair, but populated with a number of other faculty, practitioners and guest scholars, the course will sample and explore current theoretical, conceptual, political and practical issues facing the historic preservation field. The course will serve two main purposes: First, to present critical and cutting-edge cases and issues in preservation in to the preservation curriculum and the discourse of PennDesign; second, present an opportunity for second-year master's and PhD to devote an elective CU to the advanced study of preservation theory. It will revolve around a series of curated, public talks - scheduled at an hourenabling the entire HSPV Program to attend the talks - as well as course-centerroundtable discussions. The course will be offered for credit as an "Advanced Theory" seminar for second-years or PhD students; attendance by all Program students will be expected at the public talks. The schedule of topics and talks will be finalized in August, and will likely include: recent social-scientific studies of historic preservation impacts; new architectural works incorporating preservation; systems research and its implications for historic

preservation theory; and the politics of preservation advocacy.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**SM 741. Special Topics: American Marble. (D)** MATERO.Prerequisite(s): HSPV 555.

Fall 2016 - HSPV-741-301 - Special Topics in Historic Preservation: American Marble. Nearly every culture in the Old and New World has made use of natural stone for its buildings and monuments, whether as found rubble or ledge rock, cut and dressed load-bearing dimensional stone, or thin veneer cladding on a brick, steel or concrete frame. In North America, indigenous cultures of the Southwest demonstrated a highly sophisticated and long-lived tradition of masonry building long before European contact as evidenced by the surviving structures at Chaco Canyon, Mesa Verde, and other ancient settlements. Beginning with the Spanish construction of massive masonry fortifications and churches in the sixteenth and seventeenth centuries in New Spain and the rise of academic classicism in the eighteenth century European-American colonies, the preference for building in stone has carried well into the present despite changes in taste and technology. Ideologically as well as functionally, stone construction has embodied and connoted permanence and durability wherever it is found.

There is an abundant variety of stone in the United States and virtually every variety of rock firm enough to hold together has been put to use as building stone. The restoration and conservation of historic masonry structures represent a major component of the architectural and construction industry industry yet little technical information is readily available on the nature of these obsolete materials or on the appropriate methods for their repair and restoration. This seminar will offer an in depth study of American marble utilizing the newly acquired archives and stone collection of the Vermont Marble Company. Aesthetic and technical issues will be discussed as they pertain to the total understanding required for conservation practice. Part 1 will focus on the characterization and deterioration of marble and the technology related to its extraction and use in architecture and monument design and construction. The subject will be examined through research topics related to the Vermont Marble collection. Part 2 will concentrate on past nd current methods for the treatment of marble with a focus on the Hood Cemetery Entrance Gate in Germantown. The subject matter is relevant to interested students of conservation and preservation, architecture, landscape architecture, architectural history, and archaeology.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**SM 743. Conservation Studio/Seminar. (C)** Matero.Prerequisite(s): HSVPV 555 Conservation Science.

Pit and Quarry: The Cement and Slate Industries of Lehigh Valley 2013 marked the 50th anniversary of Kenneth Hudson's groundbreaking book and manifesto on "industrial archaeology," the "mongrel" field he first named as the bastard offspring of industry and archaeology. Today the remains of industry past dominate the global landscape. Urban and rural America are littered with the evidence of the last two centuries of the country's former industrial prowess and many of these places, now abandoned, hold latent value for their transformation and reuse. Despite the recent popularity of industrialchic, critics now question whether this form of "adhocism"-that is, the improvisation of new, unrelated uses devoid of meaning and interpretation-has led to , at best, a polite taming of industrial heritage,and, at worst, its disfigurement in the name of gentrification and short-sighted corporate marketing. A shift in thinking is now required for more sustainable preservation: thematic approaches that examine the problems and potential based on the original industrial processes; consideration and interventions at the landscape scale, ecological as well as architectural thinking, and finally,human connections through past and current associations.

Slate World: The Pennsylvania "Slate Belt," an area of only 22 square miles, lies approximately 50 miles to the northwest of Philadelphia and just south of Blue (Kittanning) Mountain between the Delaware and Lehigh Rivers. The first quarries opened in the 1830s, but significant growth followed in the first decade of the twentieth century when Lehigh Valley accounted for approximately half the slate produced in the United States, eventually becoming the greatest slate producing region in the world. Cement Age: Reinforced concrete would prove to be the modern material of the new century and in the United States, the creation of the first Portland cement plants in the Lehigh Valley in 1871 at Coplay, would give rise to an industry that would forever change the face of America and the world. By 1901 the Atlas Portland Cement Co. in Northampton, PA was the largest cement company in the United States - more than twice the size and probably five to ten times the size of most firms in the industry. Today the valley is still thecountry's center of cement production but automation has rendered the old plants nearly vacant, their historic mills and kilns, though still impressive, largely abandoned.

This advanced research studio builds on a current PennPraxis grant focused on the study of the cement and slate industries of Pennsylvania's Lehigh Valley. It is funded by the J. M. Kaplan Fund and directed by Frank Matero, Professor of Architecture and Historic Preservation, and aims to bring a more critical approach to the identification, evaluation, and preservation of the most important and neglected of American industrial sites. Using information already collected, students will identify specific plants within the cement and slate belts and develop conservation programs for their preservation and interpretation. Focus will be on the industrial remains: buildings, structures, machinery, and features and involve their physical recording, condition survey, and analysis. Interested students should contact Frank Matero at fgmatero@design.upenn.edu

# HISTORIC PRESERVATION
# (FA) {HSPV}

**SM 744. Architectural Archaeology: Building Lives. (B)** Matero.

Time, like space, is all around us. Its evidence is visible in the natural world as physical change. In our own fabricated material works, time exerts its presence through the tell-tale signs of stylistic and technological anachronism and material degradation. It is through these indicators that we confront time indirectly and attempt to position a thing or place in relation to the present. How buildings and landscapes are received by each generation depends on the specific conditions of time and place. Built works, be they barns or bridges, gardens or corn fields, palaces or pit houses, all reflect something of their maker and user as well as the prevailing social and cultural norms. Such trajectories are dependent on many diverse factors; however once consciously examined, all creative works under consideration for their ability to communicate to us; to have relevance in ways consistent or new to their original authorship and to contemporary society. In our efforts to relate to buildings and places from the past, we use time as the primary measure from the present and historical narrative to describe what we know.

As a form of material culture, buildings and landscapes are made and modified both consciously and unconsciously, directly and indirectly, thus reflecting individual and societal forces at play. Since the physical fabric and its evidences of alteration present one primary mode of inquiry, archaeological theory and methodology provide an excellent means to recover, read, and interpret that evidence in association with documentary and archival sources.

This course will examine the theories and techniques necessary to investigate the morphological evolution of a structure and its physical setting. Students will learn and apply methods relevant to the reading of physical fabric as demonstrated and applied to a case site. The coursework assumes a knowledge of the core curriculum in historic preservation and is therefore recommended for advanced (i.e. second year) students.

**SM 746. CONSERVATION & MGMT.**

**SM 747. (ANTH508) Conservation of Archaeological Sites and Lanscapes. (C)** Matero.

This seminar will address the history, theories, and practice of the preservation and display of archaeological sites and landscapes. The course will draw from a wide range of published material and experiences representing both national and international contexts. Topics will include site and landscape documentation and recording; site formation and degradation; intervention strategies including interpretation, display, and exhibits; tourism and development, and legislation, policy, and contemporary issues of descendent community ownership.

The course is organized as a seminar incorporating readings, lectures, and discussions focused on major themes. Readings have been selected to provide exposure to seminal works in the development of theory and method as well as current expressions of contemporary practice. Readings and discussions will be complemented by a field project. This course is open to all first and second year preservation students and all others interested in the conservation and management of archaeological sites.

**780. Architectural Conservation Advanced Praxis. (C)** Matero.

Offering training beyond the classroom, this advanced praxis in architectural conservation focuses on the integration of theory and practice. a written project proposal must be submitted for consideration and approval by faculty, and a written defense of the work must be presented after the completion of the project. Students must have completed the conservation emphasis within the Master of Science program in Historic Preservation at the University of Pennsylvania.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**750. Heritage Conservation Praxis. (L)** Matero & Guest Faculty.Prerequisite(s): HSPV 540 American Building Technology or HSPV 555 Conservation Science.

Architectural Conservation Praxis: Traditional Buildings/Traditional Practice 1 course unit. Studio. Pre-requisite: HSPV-540 or HSPV-555.This is an intensive 4 week summer course designed for students pursuing studies in architectural conservation and builds on Penn Preservation's core curriculum and the first year year conservation technology courses. The syllabus is organized around project fieldwork supplemented by lectures, demonstrations,exercises, and site visits that will allow students to experience firsthand the design and construction of vernacular buildings and the application of traditional craft- based methods to preserve them. Through a partnership with the National Park Service and the Vanishing Treasures Program, students will engage in the recording, survey, and treatment of timber and masonry structures under the supervision of Penn, NPS, and guest faculty. The course will be based in Mancos,Colorado for the first two weeks during which time students will work with with instructors on traditional construction methods including timber, brick masonry, and adobe. Students will then focus their final two weeks on field projects at selected NPS parks including Bar BC Dude Ranch at Grand Teton National Park, WY and Mesa Verde, CO. The course will also examine preservation issues related to the rich

vernacular landscape and National Park heritage with visits to other sites in the area. Accommodation will be shared cabins and meals will be a communal event and prepared by a cook. Weekends (Saturday and Sunday) are free and on your own. Cost for meals (breakfast, lunch and dinner) will be $20/day and some travel will be paid by the course budget - details to come. Students are requested to bring laptops, cameras, sleeping bags and all personal items. Moreinformation available at http://www.conlab.org/acl/edtr/Praxis/edtr praxis.html. Course enrollment is by permit only. Please contact the HSPV Dept.at pennhspv@design.upenn.edu. Course dates are 7/25/2016-8/20/2016.

**760. Preservation Planning Praxis. (L)** Rypkema/Mason.

Description: 1 course unit. Studio. Pre-requisite: HSPV 572 or 625 or other planning-centered coursework. This course is designed to meet two broad learning outcomes: first, solidify student's knowledge of basic city and regional planning concepts, systems and methods as applied to historic cities; second, and more extensively, apply this knowledge in a practical situation relevant to contemporary preservation planning practice. The course will be conducted over three weeks in the early summer and will have two distinct components: a short, first part of the course will be held in Philadelphia over three days in late May. It will focus on readings,lectures, and discussions about preservation planning in general; Randy Mason will lead this part of the course. The second, international part of the the course will take place in Yangon, the capital of Myanmar. Lasting approximately two weeks,the course's international component will center on the application of preservation-led planning and development strategies to the dynamic center of this large Asian city. Some travel will be paid by the course budget - details to come.Course enrollment is by permit only. Please contact the HSPV department at pennhspv@design.upenn.edu.

# HISTORIC PRESERVATION
# (FA) {HSPV}

**770. Interpretation, Public History and Site Management Praxis. (L)** Mason.

Description: 1 course unit. Studio. Pre-requisite: HSPV 600 and 601; 606 preferred. This course is designed to meet two broad learning outcomes: first, solidify graduate students' basic knowledge of public history issues and process; second, apply research and communication skills to the interpretation of specific heritage sites in the context of professional site management. The course will be conducted over three weeks in the early summer and will have two distinct components. The first part of the course will be held on campus over the first week of the three-week course. It will focus onthree overall subjects: close reading and debate of the literature on public history, review of case studies, and guest lectures; on interpretation best- practices and philosophies; workshops on interpretive tools.The second part of the course will take place at heritage sites all along the East Coast (specific list TBD, to include sites in New York, Washington and points between). Focus of this fieldwork will be evaluation of sites' management and interpretive experiences. The third part of the course is centered on Cliveden and its regional connections to former plantations in Delaware. Students will work with archives and site experiences to research, design and

and implement an interpretation project. Some travel will be paid by the course budget - details to come. Course enrollment is by permit only. Please contact the HSPV Dept. at pennhspv@design.upenn.edu.

**790. HSPV Summer Institute: First-year Historic Preservation Workshop. (L)** Mason.

The Workshop is an orientation course designed to prepare incoming, first-year graduate students for the intense coursework of their first semester. Generally, the Workshop orients students to the issues and methods of the core MSHP curriculum, begins familiarizing students to the resources of Philadelphia, and begins skill-building exercises. The workshop employs lectures, exercises, and fieldtrips to introduce some of the important skills, questions, and issues that will be at the center of first year's work in the Program. Documentation, descriptive analysis of buildings and places, and critical historiography are particular emphases. The Workshop also constitutes an extended introduction to the Program's faculty and the students in first-year and second-year cohorts. Course enrollment is by permit only. Please contact Amanda Bloomfield (HSPV Dept.) at amab@design.upenn.edu.

**999. Independent Study. (C)** Faculty.

An opportunity for a student to work on a special project under the guidance of a faculty member.