Study Areas and Course Descriptions, 2015–2016

In course titles, a designates fall term, b designates spring term, and c designates summer. [Bracketed courses are not offered in 2015–2016.] The School reserves the right to change the prescribed course of study as necessary.

DESIGN AND VISUALIZATION
Sunil Bald and John Eberhart, Study Area Coordinators

This study area encompasses required studios, elective advanced studios, and courses that concentrate on design logic and skills and that support design thinking and representation.

For the M.Arch. I program, required courses in this study area include a core sequence of four design studios, the first-year building project, two advanced studios, a course in formal analysis (1018a), and a four-stage sequence of courses that deal specifically with visualization methodologies. The core studio sequence progresses from spatially abstract exercises to more complex programs that require integrative thinking at various scales and situated on sites of increased complexity, while integrating ecological, landscape, and tectonic demands. In all four stages of the visualization sequence, hand, digital, 2-D, and 3-D methods are explored. The first course (1001c) of this visualization sequence is a summer course required for entering students who have not had significant prior architectural training. The next three courses (1015a, 1016b, and 1017c)—in the fall, spring, and early summer of the first year—are required of all M.Arch. I students.

For the M.Arch. II program, required courses in this study area include a core design studio (1061a), three advanced studios, and a course in computation analysis and fabrication (1062a).

Required Courses

1001c, Visualization I: Observation and Representation 6 credits. (Required of incoming M.Arch. I students with little or no academic background in architecture.) This summer course is an intensive, five-week immersion into the language of architectural representation and visualization, offering a shared inventory and basic framework upon which to build subsequent studies. Students are introduced to techniques and conventions for describing the space and substance of buildings and urban environments, including orthographic drawing, axonometric projection, perspective, architectural diagramming, vignette sketching, and physical modeling. Students work in freehand, hard-line, and digital formats. In parallel to the visualization portion of this course, an introduction to architectural history and theory focuses on principal turning points of thought and practice through to the eighteenth century. George Knight, coordinator; Trattie Davies, Kyle Dugdale

1011a, Architectural Design 6 credits. (Required in M.Arch. I first year, fall term.) This studio is the first of four core design studios where beginning students bring to the School a wide range of experience and background. Exercises introduce the complexity of architectural design by engaging problems that are limited in scale but not in the issues they provoke. Experiential, social, and material concerns are introduced together with formal and conceptual issues. Joyce Hsiang, coordinator; Brennan Buck, Trattie Davies, Rosalyn Shieh, Michael Szivos

1012b, Architectural Design 6 credits. (Required in M.Arch. I first year, spring term.) This second core studio explores inhabitation through the design of the architecture and detail of enclosure, structure, circulation, and the habitable space it produces. The work of the term focuses on the simultaneous relationship of a body to both interior and exterior environments, and their mediation by the material assemblies of building. With an initial focus on the conception and production of a singular interior space, a sequence of projects gives way to increasing physical and spatial complexity by requiring students to investigate—at close range and in intimate detail—issues of structure and enclosure, organization and circulation, urban site and climate. This work forms the conceptual background for the work in the latter half of the term—the collaborative design and construction of the Building Project, an affordable house for a nonprofit developer in New Haven. Prerequisite: 1011a. Alan Organschi, coordinator; Andrew Benner, Peter de Bretteville, Adam Hopfner, Amy Lelyveld, Joel Moore, Herbert Newman

1013c, Building Project 3 credits. (Required in M.Arch. I first year, early summer.) This course examines the materialization of a building, whereby students are required to physically participate in the construction of a structure that they have designed. By engaging in the act of making, students are exposed to the material, procedural, and technical demands that shape architecture. Construction documents are generated and subsequently put to the test in the field. Students engage in collaboration with each other, and with a client, as they reconcile budgetary, scheduling, and labor constraints, and negotiate myriad regulatory, political, and community agencies. The course seeks to demonstrate the multiplicity of forces that come to influence the execution of an architectural intention, all the while fostering an architecture of social responsibility, providing structures for an underserved and marginalized segment of the community. For 2015 students enrolled in this course are required to work on the project from May 2 through July 1. For more information, see the section on the Building Project on the Web: http://architecture.yale.edu. Prerequisites: 1011a, 1012b. Adam Hopfner, director; Kyle Bradley

1015a, Visualization II: Form and Representation 3 credits. (Required in M.Arch. I first year, fall term. No waivers allowed.) This course investigates drawing as a means of architectural communication and as a generative instrument of formal, spatial, and tectonic discovery. Principles of two- and three-dimensional geometry are extensively studied through a series of exercises that employ freehand and constructive techniques. Students work fluidly between manual drawing, computer drawing, and material construction. All exercises are designed to enhance the ability to visualize architectural form and volume three-dimensionally, understand its structural foundations, and provide tools that reinforce and inform the design process. Sunil Bald, Kent Bloomer

1016b, Visualization III: Fabrication and Assembly 3 credits. (Required in M.Arch. I first year, spring term. No waivers allowed.) This course provides an introduction to the key relationships that exist among methods of drawing, physical materials, technologies
of construction, and three-dimensional form making. The material and formal sensibilities developed in 101a, Visualization II, are mined to explore drawing as a tool leading to full-scale fabrication. The generation of form through both manual and digital methods is tested through materials and technologies of fabrication. Additive and subtractive processes, repetition and mass production, and building information modeling (BIM) are introduced as tools for assembly. "Assembly" is framed as both full-scale object and "three-dimensional" analog. Exercises and workshops provide students the opportunity to work physically with a wide variety of tools and materials as well as digitally with emerging computer-driven technologies. In this course conceived as a supplement to 101b, Building Project, students integrate drawing and model-making to develop and propose a construction that can be experienced at the human scale and be understood as an integrated architectural element. Prerequisite: 101a. Brennan Buck, John Eberhart

1017c, Visualization IV: Processing and Presentation 3 credits. (Required in M.Arch. I first year, early summer. No waivers allowed.) This seven-week, intensive course introduces Building Information Modeling (BIM) alongside manual drawing to expand each student's analytical and expressive repertoire. Fundamental techniques are introduced through short exercises and workshops leading toward a sustained study of an exemplary precedent building. Quantitative analysis is pursued through both assembly modeling and visual dissection of both the programmatic spaces and functional elements. Observational and imaginative manual drawings allow for a reconstruction of the design process and reestablish the thought patterns that formed the building's design priorities. These discoveries then are re-presented through interactive, multimedia presentations to describe the building assembly and its design ambitions. For 2015 the course will be taught from May 11 until June 26. Prerequisites: 1015a, 1016b. John Eberhart, John Blood

1018a, Formal Analysis 3 credits. (Required in M.Arch. I first year, fall term; available as an elective for M.Arch. II and M.E.D. students.) This course studies the object of architecture—canonical buildings in the history of architecture—not through the lens of reaction and nostalgia but through a filter of contemporary thought. The emphasis is on learning how to see and to think architecture by a method that can be loosely called "formal analysis." The analyses move through history and conclude with examples of high modernism and postmodernism. Reading assignments and one formal analysis are assigned each week. Peter Eisenman

1021a, Architectural Design 6 credits. (Required in M.Arch. I second year, fall term.) This third core studio concentrates on a medium-scale institutional building, focusing on the integration of composition, site, program, mass, and form in relation to structure, and methods of construction. Interior spaces are studied in detail. Large-scale models and drawings are developed to explore design issues. Prerequisites: 1011a, 1012b. Emily Abruzzo, coordinator; Peter de Bretteville, Martin Finio, Tessa Kelly, M.J. Long, Joel Sanders

1022b, Architectural Design 6 credits. (Required in M.Arch. I second year, spring term.) This fourth core studio, an introduction to the planning and architecture of cities, concerns two distinct scales of operation: that of the neighborhood and that of the residential, institutional, and commercial building types that typically constitute the neighborhood. Issues of community, group form, infrastructure, and the public realm, as well as the formation of public space, blocks, streets, and squares are emphasized. The studio is organized to follow a distinct design methodology, which begins with the study of context and precedents. It postulates that new architecture can be made as a continuation and extension of normative urban structure and building typologies. Prerequisites: 1011a, 1012b, 1021a. Andrei Harwell, coordinator; Keller Easterling, Alexander Felson, Bimal Mendis, Aniket Shahane, Rosalyne Shieh

1061a, Post-Professional Design Studio 9 credits. (Required in and limited to M.Arch. II first year, fall term.) This studio is specially designed for incoming post-professional students to introduce them to the School's educational program and faculty. Each student is given the opportunity to examine in depth a sequence of design problems. Edward Mitchell, Aniket Shahane

Advanced Design Studios (Fall)

Advanced studios are limited in enrollment. Selection for studios is determined by lottery.

1101a, Advanced Design Studio 9 credits. Elia Zenghelis, Davenport Visiting Professor

1102a, Advanced Design Studio 9 credits. Marion Weiss and Michael Manfredi, Saarinen Visiting Professors

1103a, Advanced Design Studio 9 credits. Peter Eisenman, Gwathmey Professor in Practice

1104a, Advanced Design Studio 9 credits. Demetri Porphyrios, Stern Visiting Professor

1105a, Advanced Design Studio 9 credits. Sara Caples and Everardo Jefferson, Kahn Visiting Assistant Professors; and Jonathan F.P. Rose, Bass Distinguished Visiting Architecture Fellow

1106a, Advanced Design Studio 9 credits. Alan Plattus

1107a, Advanced Design Studio 9 credits. Sunil Bald

Advanced Design Studios (Spring)

Advanced studios are limited in enrollment. Selection for studios is determined by lottery.

1111b, Advanced Design Studio 9 credits. Greg Lynn, Davenport Visiting Professor

1112b, Advanced Design Studio 9 credits. Hans Kolhoff, Davenport Visiting Professor

1113b, Advanced Design Studio 9 credits. Deborah Berke, Bishop Visiting Professor
114b, Advanced Design Studio 9 credits. Pier Vittorio Aureli, Kahn Visiting Professor
115b, Advanced Design Studio 9 credits. Frank O. Gehry, Saarinen Visiting Professor
116b, Advanced Design Studio 9 credits. Zaha Hadid and Patrik Schumacher, Foster Visiting Professors
117b, Advanced Design Studio 9 credits. Kersten Geers, Kahn Visiting Assistant Professor
118b, Advanced Design Studio 9 credits. To be announced

119b, Thesis 9 credits. Proposals for the Thesis option must be submitted for review and approval by the Design and Rules Committees by the Friday of Jury Week for the preceding spring term. Proposals must include an abstract, a proposal, a bibliography, a proposed schedule and adviser, a methodology statement, and the student’s current portfolio. Students with approved proposals can take an Independent Study with an instructor of choice in the fall term as thesis preparation. Keller Easterling, coordinator

Elective Courses

1211a, Drawing and Architectural Form 3 credits. With the emergence of increasingly sophisticated digital technologies, the practice of architecture is undergoing the most comprehensive transformation in centuries. Drawing, historically the primary means of generation, presentation, and interrogation of design ideas, is currently ill-defined and under stress. This course examines the historical and theoretical development of descriptive geometry and perspective through the practice of rigorous constructed architectural drawings. The methods and concepts studied serve as a foundation for the development of drawings that consider the relationship between a drawing’s production and its conceptual objectives. Weekly readings, discussions, and drawing exercises investigate the work of key figures in the development of orthographic and three-dimensional projection. Ultimately, the goal is to engage in a focused dialogue about the practice of drawing and different methods of spatial inquiry. Limited enrollment. Victor Agran

1213b, Architecture and Books 3 credits. For architects, the book has been a necessary (if not essential) tool for clarifying, extending, and promoting their ideas and projects. This seminar examines the phenomenon of the book in architecture as both an array of tools for clarifying, extending, and promoting their ideas and projects. This blind spot is abetted by two primary critiques—first, that affect is vague, unspeakable, and therefore nondiscursive and, second, that affect, amplified by the residue of architectural phenomenology, is inherently essentializing and conservative. However, both of these arguments are undermined by an “Affective Turn” in other fields. Over the past two decades, developments in philosophy, sociology, and neuroscience have redefined affect as a state or capacity beyond the individual and capable of influencing not only our moods, but also our ideas and our collective culture. This seminar examines contemporary ideas of what Nigel Thrift calls the “spatialities of feeling,” the nonrepresentational yet potentially political impact of the built environment. The majority of the course focuses on readings and discussion before shifting to studies of existing spaces conducted through hybridization and subtle transformation. Limited enrollment. Brennan Bick

1214a, Architectural Form 3 credits. The seminar explores the issue of Formalism as defined by writers, artists, and architects after World War II. Topics include minimalism, neo-constructivism, deconstructivism, neo-organicism, field theory, and the political aspects of form. Readings include Adorno, Greenberg, Krauss, Eisenman, Smithson, Morris, Wigley, Kipnis, and Allen. Students are expected to formulate a formal thesis in written form by curating an exhibit and writing a catalogue that justifies their choices in terms of both technique and effect. Limited enrollment. Not offered in 2015–2016. Edward Mitchell

1215a, Inner Worlds: The Politics of Affect 3 credits. The vast majority of people who occupy buildings experience them without much conscious thought, yet these precognitive, affective modes of experience go largely unexamined within our discipline today. Through case studies, the first portion of this seminar examines the relationship between a drawing’s production and its conceptual objectives. Weekly readings, discussions, and drawing exercises investigate the work of key figures in the development of orthographic and three-dimensional projection. Ultimately, the goal is to engage in a focused dialogue about the practice of drawing and different methods of spatial inquiry. Limited enrollment. Kent Bloomer

1216b, Ornament Theory and Design 3 credits. This seminar begins by reviewing the major writings governing the identities of and distinctions between ornament and decoration in architecture, e.g., Owen Jones, Riegl, Sullivan, Beeby, etc. Twentieth-century modernist actions against ornament are also examined. After individual student analysis of Victorian, Art Nouveau, and Art Deco production, the focus is on ornament in twenty-first-century design. Readings, exercises, individual final projects, and a portfolio are required. Limited enrollment. Brennan Bick

1218b, Furniture Design and Manufacture 3 credits. The final product of this design class is a finished, working, full-scale piece of furniture, related to mass production manufacturing processes. This work is also to be understood as a part of the set of courses addressing the role that the direct consideration of materials contributes to architectural design. The required materials, sequences, and programs emerge from an effort to relate the work of this class to questions of process and materiality in architecture more generally. So the attitude toward materials and their assembly should be prejudiced toward those that to some extent mimic architecture. The emphasis is on common materials joined and formed using contemporary methods and processes to serve unique purposes in unusual contexts and adapted to new programs. Admission to this course is by permission of the instructor based upon a preliminary project proposal and prior experience. Prerequisites: 1015a and 1016b. Limited enrollment. Not offered in 2015–2016. Peter de Bretteville]
[1220a, On the Face of It: Computation and the Facade] 3 credits. This seminar examines the reemerging concern with architectural representation through the discourse of geometry and computation. The building facade is the site of both performance (structural, environmental, and organizational) and politics (transparency, permeability, and fenestration). It orchestrates the building’s spatial relationships as well as engages with its social context. This seminar proposes that as architects have begun to engage with hands-on information processing, a set of sensibilities have simultaneously emerged that open up alternate modes of faciality. The dense pattern and expressed joints common to many contemporary building skins perform at multiple scales and orientations beyond front-to-back or top-to-bottom. Varying aggregations of panels and components produce relationships between the part and the whole, the one and the many, the individual and larger social structures. Initially, the contemporary state of the facade is established by examining its historical evolution and associated meanings in relation to theories of perception, representation, and figuration. Students are asked to consider the facade from the exterior as image and from the interior as performative skin. By synthesizing these two agendas and by using the Grasshopper scripting interface (tutorials and consultation throughout the term are provided—no experience or particular software facility is necessary), students redesign the facade of an existing building, reconstituting both its performance as an environmental and physical barrier and its presence as a graphic surface in the city. Limited enrollment. Not offered in 2015–2016. Brennan Buck]

1222b, Diagrammatic Analysis: Criticality after the Index] 3 credits. While formal analysis is sufficient to understand the genesis of historical buildings up until the French Revolution, that approach is no longer sufficient to understand the complexity of contemporary work, which, despite formal moments, introduces new relationships. This seminar is intended to explore analytic methods that provide an understanding of the complexities of current architectural production. This seminar focuses on historical projects, such as Piranesi’s Campo Marzio, the modern architecture of Le Corbusier and Mies van der Rohe, and contemporary buildings by OMA/Rem Koolhaas, Herzog and de Meuron, Zaha Hadid, Alejandro Zaera-Polo, and others. Students are required to produce weekly drawings and participate in reading discussions. Limited enrollment. Peter Eisenman

1224b, The Chair] 3 credits. The chair has been a crucible for architectural ideas and their design throughout the trajectory of modern architecture. The chair is both a model for understanding architecture and a laboratory for the concise expression of idea, material, fabrication, and form. As individual as its authors, the chair provides a medium that is a controllable minimum structure, ripe for material and conceptual experiments. In this seminar, students develop their design and fabrication skills through exploration of the conceptual, aesthetic, and structural issues involved in the design and construction of a full-scale prototype chair. Limited enrollment. Timothy Newton

1226b, Site + Building] 3 credits. This seminar investigates buildings and their sites. Conceived as a vehicle for understanding the relationship between site and building through critical analysis, the course examines ancient, historic, and contemporary works of architecture and landscape architecture. Material includes works by Hadrian, Diocletian, Michelangelo, Raphael, Palladio, Durand, Schinkel, Lutyens, Asplund, Aalto, Wright, Mies, Kahn, Neutra, Scarpa, Bawa, Krier, Eisenman, Ando, and Gehry. The seminar focuses on site organization strategies and philosophies of site manipulation in terms of topography; urban, suburban, and rural context; ecology; typology; spectacle; and other form-giving imperatives. Methods of site plan representation are also scrutinized. Requirements include three significant readings, one major class presentation, and the keeping of individual class notebooks. Limited enrollment. Steven Harris

1227b, Drawing Projects] 3 credits. Each student admitted to the course comes prepared with a particular subject that is investigated through the media of drawing for the entire term. There is a weekly evening pin-up with group discussion of the work in progress. Limited enrollment. Turner Brooks

1228b, Disheveled Geometries: Toward a New Rustication in Architecture] 3 credits. From the Latin rusticationem, and originally defining an unsophisticated rural mentality, the term rustication is used to describe architecture’s most extreme category of surface textures. If, historically, architectural rustication was seen as a less refined manner of shaping material that subsequently retained a rough texture, then the twenty-first-century condition would be the exact reverse. Rustication now takes more effort rather than less, and skill is measured in moving away from architectural smoothness instead of toward it. With the ability to parametrically, algorithmically, and fractally manure matter at increasingly small scales of resolution, this seminar revisits the topic of rustication, where architects design unapogetically contemporary textures that might act in the service of everything from wind dispersal, shading, insulation, water shedding, grip, power generation, physical defense, or pure aesthetic effect. Students study methods of rustication throughout history and use this research as a foundation to design and produce large-scale prototypes. Past seminars dealt with strategies involving carving textures from large homogeneous masses and strategies of complex folding, contouring, aggregation, interlocking, and effects involving new readings between texture and color. This year’s seminar focuses on membranes formed from, and of, a variety of experimental synthetic and biological sources. Students are expected to produce original work that operates at the forefront of the profession, and, accordingly, do research to locate their own work relative to that of a select group of contemporary experimental practitioners. Limited enrollment. Mark Foster Gage

1230b, Patternism: Computation and Architectural Drawing] 3 credits. This seminar employs computational software to reread architectural drawing as traditionally understood: line-based representation that establishes spatial depth and tactility. The course begins by examining architectural drawing over the past forty years, particularly in relation to digital abstraction that stressed pattern rather than representation: coherent systems without physicality or character. Referencing the discourse of modern painting and sculpture, students are asked to formulate a thesis that responds to historical shifts they find between abstraction and physicality; between the flat graphic and the illusion of depth; and between distinct drawing types, such as perspectival and orthographic. After establishing a conceptual foundation, the seminar focuses on exploiting the full potential of algorithmic software and the production of large architectural drawings. Limited enrollment. Brennan Buck
Assembly 3 credits. Digital fabrication has been theorized by Greg Lynn, Mario Carpo, Bernard Cache, and others as paradigmatic of both digital technology and contemporary commercial culture. This seminar focuses on the capacity of digital fabrication opens up for architects to directly engage with manufacturing and construction techniques, to integrate fabricated mockups and material studies into the design process, and to gain greater control over the resultant construction. Using the collective design, production, and assembly of a full-scale pavilion sited on New Haven’s Green as the seminar’s framework, the course begins with a critical evaluation of the discourse surrounding digital fabrication and an intensive examination of a specific building material and its inherent physical properties and fabrication capabilities. Students individually produce design prototypes that by midterm inform a final collaborative design. The project is then developed through component fabrication and assembly studies during the second half of the term. The pavilion is finally produced in-house and assembled on the New Haven Green in May. Limited enrollment. Not offered in 2015–2016. Brennan Buck

Graphic Inquiry 3 credits. This seminar examines how architects might use a wider array of communication processes—from text to image, from moving image to network and beyond—to describe, develop, and release their ideas strategically. The inquiry includes, but goes beyond, graphic tools to explore alternate models of knowledge creation; it is akin to research but is more open-ended in terms of its methodologies and possible outcomes. Architecture in this sense is seen in the context of a wide variety of other subjects. This seminar is structured in three parts, each one looking at a different communication medium and its effects: moving image, printed pamphlet, and a single surface/function web graphic. Each of these media implies different ideas of duration, attention, audience, and distribution and is explored through a series of activities: illustrated talks, readings, precedent studies, and three projects developed by each student. Limited enrollment. Not offered in 2015–2016. Luke Bulman

Composition 3 credits. This seminar, consisting of weekly exercises, addresses issues of architectural composition and form. Leaving aside demands of program and site in order to concentrate on formal relationships at multiple scales, these exercises are intended to establish proficiency with “the language of architecture” as well encourage confidence in personal, formal proclivities. Students are responsible for their weekly designs as well as for critiquing the projects of their fellow students; the goal is not only formal and compositional dexterity but also eyes that can see the organizational paradigms at work in any piece of architecture. Limited enrollment. Peter de Bretteville

Design Reconnaissance 3 credits. Significant advances in technology and material intelligences have ushered in an era of explosive innovation in virtually every discipline of design. In an effort to capitalize on these developments for architecture, this seminar proposes a new model of design research—that of the military reconnaissance mission—not into physical territories but rather into other industries. The sole purpose of such research is to discover innovative methods for creating, manipulating, and fabricating new genres of form and function for potential use in architecture. The course researches the tools and related expertise found in industries such as fashion, automotive and industrial design, robotics, jewelry design, and, increasingly, biology and the manipulation of cellular structures. Students research design methods, tools, and materials specific to these disciplines and convert this newfound expertise into a series of self-determined research projects. Experts from these disciplines participate in the seminar throughout the term. A series of field trips is required to visit key figures and facilities from the aforementioned industries. Limited enrollment. Not offered in 2015–2016. Mark Foster Gage

From Bogardus to 3–D Printing: Advanced Fabrication in Architecture 3 credits. Architectural practice has been profoundly affected by new tools of representation that are now leading ever more directly to both fabrication and actual erection of buildings, at the center of which are robotics and 3-D printers. Software has replaced the physical “kit-of-parts” as the instrument of standardization, resulting in systems in which the parts are infinitely customizable. This has increased the necessity for architects to seriously consider the techniques and strategies of prefabrication. What are the architectural implications of this, and will a new language emerge? This seminar begins with five lectures: New Materials at the Turn at the Century; Cast Iron and Other Systems; Postwar Explorations 1940–55; Systems and Techno Fantasies of the 1960s and ‘70s; and Emerging Methods, Robotics, and 3-D Printing. These lectures set the stage for the students’ research into materials and a system or systems that are presented to the class and that culminate in an illustrated paper as well as a 3-D printed model describing the system, including all of its components. Prerequisites: skills in 3-D printing. Limited enrollment. Not offered in 2015–2016. Peter de Bretteville

Theory through Objects 3 credits. Since Alberti, architecture has been differentiated from building through its relationship to concepts, theories, and various aspects of metaphysical philosophy. Recent trends in the discipline, however, place these ideas in locations other than the final architectural “object.” Instead, they are lodged in processes—through diagrams, mappings, and scholarly intellectual practices distant from the actual act of design. Although this trajectory leaves the discipline of architecture fortified with informed intellectual content, it is left with few mechanisms that allow it to actually be manifest within the primary product of our discipline—form. This seminar reverses this process by using the design of actual forms and objects as a means to directly engage currently emerging developments in architectural theory and metaphysical philosophy. Ideas addressed include object-oriented ontology, weird realism, dark ecology, onticology, alien phenomenology, disruption theory, and the possibility of hyperobjects. As a background to this pursuit, students also study moments in recent architectural history when architectural theory, typically emerging from metaphysical philosophy, had a direct and tangible influence on the design of form. These moments, for instance, include the relationships between Jacques Derrida and Deconstruction, and Gilles Deleuze and Digital Formalism. This seminar relies heavily on group conversation about limited and focused readings, and speculative projects in which students test new theoretical directions through the design of objects. This course fulfills the History and Theory elective requirement with the addition of a fifteen–page paper intellectually positioning the translation of a student-selected theoretical ambition into a designed object. Limited enrollment. Not offered in 2015–2016. Mark Foster Gage
1240a, Custom Crafted Components  3 credits. This historically grounded, hands-on, project-based seminar requires individual aesthetic expression via the crafting of tangible, original, intimately scaled architectural elements. Exploration and experimentation with unusual combinations and sequences of analog and digital representation are encouraged by way of challenging preconception and expanding the spectrum of aesthetic expression. Selected iterations are developed into designs for specific building components and contexts. Relationships among creative liberty, craft, and manufacturing are explored via prototyping custom components using materials, means, and methods that are reasonable in contemporary professional practice. Limited enrollment. Kevin Rotheroe

1241a, Rendered: Architecture and Contemporary Image Culture  3 credits. This course addresses the role of image making in architecture at a time when consumers of culture, including architects, are inundated by images. While images can never replace the experience of a building in time and space, it is their potential to circulate so seamlessly that gives them undeniable power as our discipline’s primary means of engagement with popular culture. The course questions their status as solely representational, a sign of some other, more “real,” object. What is the relationship they construct between real and simulacrum? Can images produce alternate realities rather than simulate our own? Can they resist their own illusionary function? The course revolves around readings and discussion dealing with these questions, but also deals directly with techniques of image making. The final project is the production of a pair of large architectural images of a previous project. Limited enrollment. Students who have taken 1215a, Inner Worlds, are not eligible for this course. Brennan Buck

1291c, Rome: Continuity and Change  3 credits. (Open only to M.Arch. I second-year and M.Arch. II first-year students.) This intensive five-week summer workshop takes place in Rome and is designed to provide a broad overview of that city’s major architectural sites, topography, and systems of urban organization. Examples from antiquity to the present day are studied as part of the context of an ever-changing city with its sequence of layered accretions. The seminar examines historical continuity and change as well as the ways in which and the reasons why some elements and approaches were maintained over time and others abandoned. Hand drawing is used as a primary tool of discovery during explorations of buildings, landscapes, and gardens, both within and outside the city. Students devote the final week to an intensive independent analysis of a building or place. M.Arch. I students are eligible to enroll in this course after completing at least three terms. This course does not fulfill either the History and Theory or the Urbanism and Landscape elective requirements. Limited enrollment. Joyce Hsiang, George Knight, Bimal Mendis

1299a or b, Independent Course Work  3 or 6 credits. Program to be determined with a faculty adviser of the student’s choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student’s eligibility under the rules. (See the School’s Academic Rules and Regulations.)

The following courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

ART 110a or b, Sculpture Basics  The concepts of space, form, weight, mass, and design in sculpture are explored and applied through basic techniques of construction and material. Various techniques of gluing and fastening, mass/weight distribution, hanging/mounting, surface/finishing, and types of materials are addressed. In addition to the hands-on application of sculptural techniques, class time is spent looking at various concepts and approaches to the understanding and development of sculptural ideas, from sculpture as a unified object to sculpture as fragmentary process. Selected readings complement the studio work. An introduction and orientation to the wood shop and metal facilities is covered. The shops and the classroom studio are available during days and evenings throughout the week. This course is recommended before advancement into ART 120a, 121b, 122a, or 125a. Enrollment limited to twelve. Materials fee: $75. Michelle Lopez and faculty

ART 111a or b, Visual Thinking  An introduction to the language of visual expression, using studio projects to explore the fundamental principles of visual art. Students acquire a working knowledge of visual syntax applicable to the study of art history and popular culture, as well as art. Projects address all four major concentrations (graphic design, painting/printmaking, photography, sculpture). No prior drawing experience necessary. Open to all undergraduates; required of all art majors. Materials fee: $25. Anna Betbeze and Anahita Vossoughi

ART 114a or b, Basic Drawing  An introduction to drawing, emphasizing articulation of space and pictorial syntax. Class work is based on observational study. Assigned projects address fundamental technical and conceptual problems suggested by historical and recent artistic practice. No prior drawing experience necessary. Open to all undergraduates; required of all art majors. Materials fee: $25. Anna Betbeze, Munro Galloway, Samuel Messer, William Villalongo, Natalie Westbrook, and faculty

ART 116b, Color Practice  Students are introduced to the theory and practice of color through observation, experimentation, readings, screenings, discussion, and creative projects. We attempt to arrive at an understanding of color as an evolving scientific, philosophical, and cultural phenomenon. Students are encouraged to consider the role of color in historical and contemporary art practices and in relation to their own artistic development. Required of painting concentration art majors. Materials fee: $75. Anna Betbeze

ART 120a, Introduction to Sculpture: Wood  An introduction to wood and woodworking technology through the use of hand tools and woodworking machines. Students are guided in the construction of singular objects and learn strategies for installing those objects in order to heighten the aesthetic properties of each work. Students discover both how an object works in space and how space works upon an object. Materials fee: $75. Julian Gilbert-Davis
ART 121b, Introduction to Sculpture: Metal  An introduction to working with metal by examining the framework of cultural and architectural forms. A focus is the comprehensive application of construction in relation to concept. The class offers instruction in welding and general metal fabrication in order to create forms in response to current issues in contemporary sculpture. It also gives a solid foundation in learning how the meaning of work derives from materials and the form those materials take. Materials fee: $75. Brent Howard

ART 122a, Introduction to Sculpture: Video  An intensive investigation of time-based works through such mediums as performance, video, installation, and sound. Emphasis placed on the integration and manipulation of mediums and materials to broaden the historical context. Critiques, readings, video screenings, and artist lectures consider how the history of time-based works informs a contemporary practice. Frequent workshops complement the studio work. The shops and studios are available during class time and during days and evenings throughout the week. Enrollment limited. Materials fee: $150. Sandra Burns

ART 125a, Introduction to Sculpture: Mold Making  This course offers instruction in the practical aspects of mold making and casting in a variety of materials and techniques. The objective is to provide students with the principles of this traditional technology and infuse these techniques into their practice and creation of sculpture. A foundation in how objects around us are reproduced is essential for the modern sculptor in a culture of mass production. Contemporary issues of art and culture are also discussed. Students are introduced to four major types of molding techniques: waste molds, piece molds, life casts, and flexible molds. Materials fee: $75. Carolyn Salas

ART 130a or b, Painting Basics  A broad formal introduction to basic painting issues, including the study of composition, value, color, and pictorial space. Emphasis is on observational study. Class and individual assignments introduce students to the technical and historical issues central to the language of painting. Recommended for non-art majors. Materials fee: $75. Faculty

ART 132a or b, Introductory Graphic Design  A studio introduction to visual communication with an emphasis on principles of the visual organization of design elements as a means to transmit meaning and values. Topics include shape, color, visual hierarchy, word/image relationships, typography, symbol design, and persuasion. Development of a verbal and visual vocabulary to discuss and critique the designed world and contribute significant projects to it. Materials fee: $150. Yeju Choi and Henk van Assen

ART 265b, Typography II  Continued studies in typography incorporating more advanced and complex problems. Exploration of grid structures, sequentiality, and typographic translation, particularly in the design of contemporary books, and screen-based kinetic typography. Relevant issues of design history and theory are discussed in conjunction with studio assignments. Materials fee: $150. Prerequisites: ART 132a or b and ART 264a. Henk van Assen

ART 301b, Critical Theory in the Studio  This course introduces students to key concepts in modern critical theory and examines how these ideas can aid in the analysis of creative work in the studio. Psychoanalysis, Marxism, feminism, structuralism, and poststructuralism are examined in relation to modern and contemporary movements in the visual arts, including cubism, surrealism, Arte Povera, pop, minimalism, conceptual art, performance art, the pictures group, and the current relational aesthetics movement. Materials fee: $25. Joy Jeehye Kim

ART 342a and 346b, Material Form and Fabrication  In this course students continue to work in response to assignments. These assignments are designed to provide further investigation into the history of making and thinking in sculpture and to raise questions pertinent to contemporary art. The opportunity exists to explore new techniques and materials while honing familiar skills. This course is designed to help students become self-directed in their work. Individual and group discussion, and visits to museums and galleries, play a significant role. Enrollment limited to twelve. Materials fee: $75. Prerequisite: ART 120a, 121b, 122a, or equivalent, or permission of the instructor. Julian Gilbert-Davis and Brent Howard

ART 356a, Printmaking I  An introduction to intaglio (drypoint and etching), relief (woodcut), and screen printing (stencil), as well as the digital equivalents to each technique, including photo screen printing and laser etching and/or CNC milling. Students examine how these analog and digital techniques inform the outcome of the printed image as well as how they can be combined to create more complex narratives. The class culminates with the making of a unique object that integrates the above techniques and evades traditional definitions of printmaking. Materials fee: $150. Prerequisite: ART 114a or b or equivalent.

ART 368a, Intermediate Graphic Design  Various ways that design functions; how visual communication takes form and is recognized by an audience. Core issues inherent in design: word and image, structure, and sequence. Analysis and refinement of an individual design methodology. Attention to systematic procedures, techniques, and modes of inquiry that lead to a particular result. Materials fee: $150. Prerequisites: ART 132a or b and ART 264a, or permission of the instructor. Pamela Hovland

DRAM 102a/b, Scene Design  An introduction for all non-design students to the aesthetics and the process of scenic design through critique and discussion of weekly projects. Emphasis is given to the examination of the text and the action of the play, the formulation of design ideas, the visual expression of the ideas, and especially the collaboration with directors and all other designers. Three hours a week. Open to nondepartmental and non-School of Drama students with prior permission of the instructor. Ming Cho Lee, Michael Yeargan

DRAM 229a, Theater Planning and Construction  This course is an introduction to planning, design, documentation, and construction of theaters, concert halls, and similar spaces. Emphasis is placed on the role of the theater consultant in functional planning and architectural design. The goal is to introduce the student to the field and provide a basic understanding of the processes and vocabulary of theater planning. Open to nondepartmental and non-School of Drama students with permission of the instructor. Eugene Leitermann

MGT 557b, Design and Marketing of New Products  Subrata K. Sen
TECHNOLOGY AND PRACTICE

Michelle Addington and Kyoung Sun Moon, Study Area Coordinators

This study area explores fundamental theories and methods of building technologies and the relationships among these technologies, architectural design, and the larger natural environment. Courses examine materials, construction, structural systems, and the environmental technologies that provide healthy, productive, sustainable, and comfortable environments. This area also covers professional practice and examines the relationship between methods of construction, procurement, and management. Advanced courses investigate specific technical systems in greater detail, survey emerging methods and technologies, and explore the relationship between building technologies and architectural design in current practice and writings.

For the M.Arch. I program, requirements in this study area include six courses that survey common technical systems used in buildings and integrate the consideration of these technical systems into architectural design through a series of projects of increasing complexity. In addition, there is a required course on architectural practice.

Required Courses

2011a, Structures I 3 credits. (Required in M.Arch. I first year, fall term.) An introduction to the analysis and design of building structural systems and the evolution and impact of these systems on architectural form. Lectures and homework assignments cover structural classifications, fundamental principles of mechanics, computational methods, and the behavior and case studies of truss, cable, arch, and simple framework systems. Discussion sections explore the applications of structural theory to the design of wood and steel systems for gravity loads through laboratory and computational exercises and design projects. Homework, design projects, and midterm and final examinations are required. Kyoung Sun Moon

2012b, Structures II 3 credits. (Required in M.Arch. I first year, spring term.) This course is a continuation of introductory analysis and design of building structural systems. The course introduces materials and design methods of timber, steel, and reinforced concrete. Structural behavior, ductility concepts, movement, and failure modes are emphasized. Geometric properties of structural shapes, resistances to stresses, serviceability, column analysis, stability, seismic, wind load, and lateral force resisting systems are presented. Homework involves calculations, descriptive analysis, and the building and testing of structural models. Midterm and final examinations are required. Prerequisite: 2011a. Kyoung Sun Moon

2015b, Building Technology 3 credits. (Required in M.Arch. I first-year, spring term.) This course examines the role of material and procedure in the formation of architecture and the physical, logistical, and environmental constraints and demands that shape the processes of construction. In the first half of the term, a sequence of lectures surveys the conceptual concerns and technological factors of building: the origin and processing of the major classes of building materials; their physical properties, capacities, and vulnerabilities to physical and environmental stressors; the techniques used to work those materials; and the principles, procedures, and details of building assembly. Corresponding construction examples and case studies of mid-scale public buildings introduce students to the exigencies that so often influence decision making in the technical process and inflect (and potentially enrich) design intention—regulatory requirement, physical and environmental stress and constraint, procedural complication, labor and material availability and quality, energy consumption, and ecological impact. After spring recess and in coordination with the studio design phase of the Building Project, the course turns to the detailed study of light wood-frame construction. Five lectures with practical exercises track the stages of construction of the single-family house and supplement ongoing design development of the Building Project house. In both its direct technical application to the work in the studio and its exploration of more general themes in current construction practice, the course seeks to illuminate the ecological considerations as well as the materials, means, and methods that are fundamental to the conception and execution of contemporary building. Adam Hopfner, Alan Organschi

2021a, Environmental Design 3 credits. (Required in M.Arch I second year, fall term.) This course examines the fundamental scientific principles governing the thermal, luminous, and acoustic environments of buildings, and introduces students to the methods and technologies for creating and controlling the interior environment. Beginning with an overview of the Laws of Thermodynamics and the principles of Heat Transfer, the course investigates the application of these principles in the determination of building behavior, and explores the design variables, including climate, for mitigating that behavior. The basic characteristics of HVAC systems are discussed, as are alternative systems such as natural ventilation. The second half of the term draws on the basic laws of physics for optics and sound and examines the application of these laws in creating the visual and auditory environments of a building. Material properties are explored in detail, and students are exposed to the various technologies for producing and controlling light, from daylighting to fiber optics. The overarching premise of the course is that the understanding and application of the physical principles by the architect must respond to and address the larger issues surrounding energy and the environment at multiple scales and in domains beyond a single building. The course is presented in a lecture format. Homework, computational labs, design projects, short quizzes, and a final exam are required. Michelle Addington

2022b, Systems Integration and Development in Design 3 credits. (Required in M.Arch. I second year, spring term.) This course is an integrated workshop and lecture series in which students develop the technical systems of preliminary design proposals from earlier studio work. The careful advancement of structural form and detail, environmental systems, and envelope design, as well as an understanding of the constructive processes from which a building emerges, are all approached systematically, as elements of design used not only to achieve technical and performance goals but also to reinforce and re-inform the conceptual origins of the work. The workshop is complemented by a series of lectures from leading structural, environmental, and envelope consultants. Detailed technical drawings and analyses, along with the use of BIM software, are required. Prerequisites: 2012a, 2011a, 2012b, 2015b, 2021a. Martin Finio, coordinator; Anibal Bellomio, Eric Buckley, Robert Haughney, Kristin Hawkins, Kenneth Gibble, John Jacobson, Laurence Jones, Miriam Peterson, Laura Pirie, Victoria Ponce de Leon, Craig Razza, Edward M. Stanley, Philip Steiner, Adam Trojanowski
2031a, Architectural Practice and Management 3 credits. (Required in and limited to M.Arch. I third year, fall term. No waivers allowed.) The process by which an architectural design becomes a building requires the architect to control many variables beyond the purely aesthetic, and understanding how to control that process is key to successful practice. This course provides an understanding of the fundamentals of the structure and organization of the profession and the mechanisms and systems within which it works as well as the organization, management, and execution of architectural projects. Lectures explore the role and function of the architect, the legal environment, models of practice and office operations, fees and compensation, project delivery models and technology, and project management in the context of the evolution of architectural practice in the delivery of buildings. Phillip Bernstein

Elective Courses

[2211a, Structures and Facades for Tall Buildings 3 credits. This seminar investigates the dynamic interrelationship between technology and architecture in tall buildings. Among the various technologies involved, emphasis is placed on structural and facade systems, recognizing the significance of these systems, the separation of which in terms of their function led to modern architecture, and allowed the emergence of tall buildings. This seminar reviews contemporary design practice of tall buildings through a series of lectures and case study analyses. While most representative structural and facade systems for tall buildings are studied, particular emphasis is placed on more recent trends such as diagrid structures and double-skin facades. Further, this seminar investigates emerging technologies for tall buildings and explores their architectural potentials. Finally, this course culminates in a tall building design project and presentation. Limited enrollment. Not offered in 2015–2016. Kyoung Sun Moon]

[2212a, The Liquid Threshold between Order and Chaos 3 credits. This seminar explores the design of complex three-dimensional structural systems. Through discussions on existing projects, including some of the instructors’ own, and also modeling and testing new systems to destruction, both physically and digitally (using tools such as Karamba 3D), the seminar intends to foster a deeper intuitive understanding of structures. At what point do you know a structure is at its limit? Limited enrollment. Not offered in 2015–2016. Neil Thomas, Aran Chadwick]

[2213a, Architecture as Building 3 credits. This course analyzes the major buildings of this century through detailed dissection of their methods of construction. Graphic display of the major systems that make up a contemporary work of architecture allows for a reconstruction of the design process and reestablishes the thought patterns that formed the design priorities. Emphasis is on the relation of systems of structure and enclosure with the required technical systems. Limited enrollment. Not offered in 2015–2016. Thomas Beeby]

[2215a, Architecture as Building 3 credits. This course presents historical, contemporary, and emerging methods of material formation from a designer’s perspective. Emphasis is placed on processes useful for custom architectural fabrication, especially those that enable students to capitalize on opportunities generated by computer-aided design and manufacturing (CAD/CAM). Distinctions between direct and indirect making are emphasized in terms of the formal freedom various techniques afford designers. Students are encouraged to cultivate specific aesthetic interests and experiment with the translation of variations into a series of material prototypes in order to benchmark results and better inform their own design process going forward. Limited enrollment. Not offered in 2015–2016. Kevin Rotheroe]

[2214b, Craft, Materials, and Digital Artistry 3 credits. This course reviews materials and manufacturing processes especially suited for digitally crafting aesthetically unique architectural components and surfaces. Cross-fertilization of digital and conventional modes of making is emphasized, as this approach often enables economically viable opportunities for creative expression. This is a hands-on, project-based seminar addressing fundamental theoretical issues in the transformation of ideas into material reality via representations, hand-operated tools, and CNC-automated forming devices. Limited enrollment. Kevin Rotheroe]

[2219a, Studies in Light and Materials 3 credits. This seminar provides an overview of the basic characteristics and families of “phenomenological” materials, with a special focus on materials and technologies that have a relationship to light and vision. Materials and technologies, such as LEDs, smart glazing, displays, and interactive surfaces, are examined in depth, and some of the contemporary experiments taking place in the architectural profession are explored. Throughout the term, students catalog relevant properties and begin to develop a mapping between behaviors and phenomena. Students have the opportunity to interact with some of the well-known architects who are at the heart of the current experimentation. Each student learns how to coherently discuss material fundamentals and comprehensively analyze current applications. The seminar culminates with each student focusing on a material characteristic with which to explore different means of technology transfer in order to begin to invent unprecedented approaches. There are several exploratory assignments and a final design experiment. Limited enrollment. Not offered in 2015–2016. Michelle Addington]
2226b, Design Computation 3 credits. The capabilities and limitations of architects’ tools influence directly the spaces architects design. Computational machines, tools once considered only more efficient versions of paper-based media, have a demonstrated potential beyond mere imitation. This potential is revealed through design computation, the creative application of the processes and reasoning underlying all digital technology, from e-mail to artificial intelligence. Just as geometry is fundamental to drawing, computation affords a fundamental understanding of how data works, which is essential to advance the development of BIM, performative design, and other emerging methodologies. This seminar introduces design computation as a means to enable architects to operate exempt from limitations of generalized commercial software; to devise problem-specific tools, techniques, and workflows; to control the growing complexities of contemporary architectural design; and to explore forms generated only by computation itself. Topics include data manipulation and translation, algorithms, information visualization, computational geometry, human-computer interaction, custom tooling, generative form-finding, emergent behavior, simulation, and system modeling. Using Processing, students develop computational toolsets and models through short, directed assignments ultimately comprising a unified, term-long project. Limited enrollment. Michael Szivos

2229a, Timber and High-Performance Wood Technology 3 credits. This seminar explores recent innovations in forest management and timber construction technology and considers their implications for architectural technique and building morphology. By traversing scale, from the engineering of wood fiber in structural members to the development of a timber-structured, high-density, high-rise urbanism, and by spanning the material life cycle of wood, from silvicultural practice to the disassembly and reuse of timber buildings, students investigate newfound capacities and applications of wood as a high-performance construction material and assess its impact on both the local and global ecologies. Through examination of the history and current science of silviculture, evolving methods of timber extraction, the development and processing of structural wood products, and their application in a range of timber building assemblies, this seminar evaluates the potential of engineered wood as a primary structural material in unconventional applications and assesses its impacts—relative to alternative material systems—in terms of land use, energy consumption, and greenhouse gas emissions. In the latter half of the course, students develop research projects on selected topics in three phases: as an oral presentation, a written paper, and a quantitative assessment or development of an experimental prototype. Limited enrollment. Not offered in 2015–2016. Alan Organschi]

2230b, Exploring New Value in Design Practice 3 credits. How do we make design a more profitable practice? Design practice has traditionally positioned building as a commodity in the delivery supply chain, valued by clients like other products and services purchased at lowest first cost. Despite the fact that the building sector in its entirety operates in large capital pools where significant value is created, intense market competition, sole focus on differentiation by design quality, and lack of innovation in project delivery and business models have resulted in a profession that is grossly underpaid and marginally profitable. The profession must explore new techniques for correlating the real value of an architect’s services to clients and thereby break the downward pressure on design compensation. This seminar redesigns the value proposition of architecture practice, explores strategies used by better-compensated adjacent professions and markets, and investigates methods by which architects can deliver—and be paid for—the value they bring to the building industry. Limited enrollment. Phillip Bernstein, John Apicella

2299a or b, Independent Course Work 3 or 6 credits. Program to be determined with a faculty adviser of the student’s choice and submitted, with the endorsement of the study area coordinators, to the Rules Committee for confirmation of the student’s eligibility under the rules. (See the School’s Academic Rules and Regulations.)

The following courses offered elsewhere in the University may be taken for credit with permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

DRAM 1244/b, Introduction to Lighting Design An introduction for all non-lighting design students to the aesthetics and the process of lighting design through weekly critique and discussion of theoretical and practical assignments. Emphasis is given to the examination of the action of the play in relation to lighting, the formulation of design ideas, the place of lighting in the overall production, and collaboration with directors, set, costume, and sound designers. Open to nondepartmental and non-School of Drama students with prior permission of the instructor. Robert M. Wierzel

F&ES 775a, Sustainable Sites This course provides students with an overview of the different processes and players involved in planning, creating, and managing sustainable sites, through the lens of the framework and principles of the Sustainable Sites Initiative. Main topics include framework for and assessment of sustainable sites; site implementation aspects such as planning, design, construction, and maintenance; and real-world applications. The course consists of core lectures by principal instructors, with guest lectures by Sustainable Site practitioners—ecologists, planners, designers (architect and landscape architect), contractors, and site managers. A term-long project allows students to develop site strategies for a local development proposal. Enrollment limited to fifteen. Andrew Tung

FRES 885b/ENAS 660b, Green Engineering and Sustainability This hands-on course highlights the key approaches to advancing sustainability through engineering design. The class begins with discussions on sustainability, metrics, general design processes, and challenges to sustainability. The current approach to design, manufacturing, and disposal is discussed in the context of examples and case studies from various sectors. This
provides a basis for what and how to consider when designing products, processes, and systems to contribute to furthering sustainability. The fundamental engineering design topics to be addressed include toxicity and benign alternatives, pollution prevention and source reduction, separations and disassembly, material and energy efficiencies and flows, systems analysis, biomimicry, and life cycle design, management, and analysis. Students tackle current engineering and product design challenges in a series of class exercises and a final design project. Julie Zimmerman

**F&ES 894a, Green Building: Issues and Perspectives** Our built environment shapes the planet, our communities, and each of us. Green building seeks to minimize environmental impacts, strengthen the fabric of our cities and towns, and make our work and home lives more productive and fulfilling. This course is an applied course, exploring both the technical and the social-business-political aspects of buildings. Topics range from building science (hygrothermal performance of building enclosures) to indoor environmental quality; from product certifications to resilience (robust buildings and communities in the face of disasters and extended service outages). The purpose of this course is to build a solid background in the processes and issues related to green buildings, equipping students with practical knowledge about the built environment. Extensive use is made of resources from BuildingGreen, Inc., one of the leading information companies supporting green building and green building professionals. The course is primarily a lecture-discussion one with some fieldwork, substantial emphasis on research and group project work, and online individual testing. The course is strengthened by several guest lectures by leading green building professionals from across the country and across many disciplines: from architecture to material science, from engineering to green building business. The class meets once a week, with the instructor available to students during that same day. Enrollment limited to twenty-four. Peter Yost

**MENG 185b, Mechanical Design** A course designed for potential majors in mechanical engineering, with units on design, materials science, structural mechanics, utilization of a machine shop, mechanical dissection, and computers in mechanical engineering. Includes a design project competition. Prerequisite: physics at the level of PHYS 180, or permission of the instructor. Aaron Dollar

**MENG 491b, Appropriate Technology and the Developing World** Introduction to user-centered design through exploration of appropriate technology, a class of solutions that solve a particular need and are viable and sustainable within the environmental, economic, cultural, and technological infrastructure for which they are intended. Focus on technologies for use in the developing world. Student design teams conceptualize, ideate, prototype, and generate a commercialization plan for a real-world appropriate technological device. Joseph Zinter

**HISTORY AND THEORY**

Karla Britton and Edward Mitchell [F], Eeva-Liisa Pelkonen [Sp], Study Area Coordinators

This study area explores the relationship between design, history, and theory through a broad range of courses in which the analysis of buildings, cities, landscapes, and texts supports the articulation and criticism of fundamental concepts, methods, and issues. Historical and contemporary projects and writings are studied in context and as part of the theoretical discourse of architecture.

For entering M.Arch. I students who have not had significant prior architectural training, the pre-first-year visualization course (1001c) includes a broad survey of Western architectural history to the nineteenth century. For all M.Arch. I students, there is a first-year required survey course of nineteenth- and twentieth-century architectural history (3011a) followed in the second year by two required courses on architectural theory (3021a and 3022a).

In addition, M.Arch. I students must satisfactorily complete two elective courses from this study area that require at least a fifteen-page research paper. With the exception of courses in which a student elects to do a project in lieu of a research paper, or courses whose descriptions specifically indicate that they do not fulfill the History and Theory elective requirement, all elective courses in this study area fulfill this requirement. Provided a fifteen-page research paper is required, the elective courses 1214a, 1239a, 4211a, 4212a, 4213a, 4214a, 4216a, 4217b, 4222a, 4223b, 4229a, and 4231b also fulfill this History and Theory elective requirement, although those listed from the Urbanism and Landscape study area cannot be used to satisfy both the History and Theory and the Urbanism and Landscape elective requirements. Courses in other study areas as well as courses offered at the University outside of the School of Architecture that include a research paper and cover an architectural history and theory topic may fulfill the History and Theory elective requirement provided a student requests and receives permission from one of the History and Theory study area coordinators qualifying that course to fulfill the requirement. One of the two required History and Theory electives should be in a non-Western subject.

For the M.Arch. II program, there is a second-year required course dealing with issues of architecture and urbanism (3071a).

**Required Courses**

**3011a, Modern Architecture** 3 credits. (Required in M.Arch. I first year, fall term; available as an elective for M.Arch. II and M.E.D. students.) The course embraces the last century and a half’s history of architecture, when traditional fables began to yield to more scientifically conceived ideas of architecture’s role in the creation of civilizations. As architecture gained importance in advancing social and industrial agendas, it also built a basis for theoretical reflection and visionary aesthetics. The expanding print and media culture accelerated the migration of ideas and propelled architecture beyond its traditional confines. Discussion of major centers of urban culture and their characteristic buildings alternates with attention to individual concepts and their impact in an increasingly interconnected culture of design. Kurt W. Forster

**3021a, Architectural Theory I: 1750–1968** 3 credits. (Required in M.Arch. I second year, fall term; available as an elective for M.Arch. II and M.E.D. students.) History of Western architectural theory, 1750–1968, through the close reading of primary texts. Lectures place the readings in the context of architectural history; the texts are discussed in required discussion sections. Topics include discussions of theories of origin and character, the picturesque, debates regarding style, historicism, and eclecticism, Gothic
Revival, questions of ornament, architectural modernism, functionalism, and critiques of modernism. Marta Caldeira

302b, Architectural Theory II: 1968–Present 3 credits. (Required in M.Arch. I second year, spring term; and in M.Arch. II and M.E.D. first year, spring term.) This course is a survey of theoretical and critical literature on contemporary architecture. It explores the texts of postmodernism, post-structuralism, and critical and post-critical discourses, as well as current debates in globalization, post-humanism, and environmentalism in the architectural discipline from 1968 to the present. Prerequisite for M.Arch. I: 3021a. Anthony Vidler

3071a, Issues in Architecture and Urbanism 3 credits. (Required in and limited to M.Arch. II third term.) Current issues in architecture and urbanism, explored through seminars and case studies introducing methods and theories of architectural research. Edward Mitchell

3091a, Methods and Research Workshop 3 credits. (Required in and limited to M.E.D. first year, fall term.) This course introduces students to methods of architectural writing and research, laying the groundwork for an advanced research project. By investigating various text genres, such as surveys, journalism, manifestos, scholarly essays, critical essays, and narratives, this course studies ways of writing about architecture, urbanism, and the environment. Recent debates concerning the relationship between architectural history and theory and the questions about disciplinary and interdisciplinary boundaries are explored. Working toward a substantial research paper requirement, students are introduced to hands-on research through a series of library and archival workshops. Limited enrollment. Kyle Dugdale

3092a or b, Independent M.E.D. Research 3–6 credits first year, fall term; variable credits remaining terms, determined in consultation with the director of M.E.D. Studies. (Required in and limited to M.E.D. each term.) The proposal submitted with the admissions application is the basis for each student’s study plan, which is developed in consultation with faculty advisers. Independent research is undertaken for credit each term, under the direction of a principal adviser, for preparation and completion of a written thesis. The thesis, which details and summarizes the independent research, is to be completed for approval by the M.E.D. committee by the end of the fourth term. M.E.D. faculty

Elective Courses

[3213b, Architecture and Capitalism 3 credits. This seminar examines the relationship between capitalism and architecture from both a theoretical perspective – Marxism’s/neo-Marxism’s critique of culture, art, and architecture – and from an architectural perspective – architecture’s participation in, resistance to, and speculation about capitalism. The course examines different periods of architectural history from the perspective of theorists and what they had to say about cultural/architectural production and from the perspective of architects and what they had to say about their role in capitalism. The theorists examined include Marx, Ruskin, Simmel, thinkers of the Frankfurt School, Tafuri, Jameson, Slavoj Zizek, Naomi Klein, while the architects include Morris, Muthesius, Gropius, Hilberseimer, Peter Eisenman, Rem Koolhaas. Each week an initial 45-minute lecture by the professor is followed by in-class presentations and discussion by the students. A fifteen-page paper is required at the end of the term. Limited enrollment. Not offered in 2015–2016. Peggy Deamer]

3214b, The Construction of Exactitude: Classicism and Modernism 3 credits. This seminar examines the theme of exactitude as a design and constructional theoretical method in the creative processes of seminal architects over the past one hundred years. Conceived to readress the concept of the classical in architectural thought and practice (understood not as style but as a rational process of distillation, clarity, economy, and syntax), the seminar emphasizes how fundamentals derived from this mode (unity, composition, proportion) have shaped the work of leading modern architects. Concepts addressed are the universal, the tectonic, permanence, cultural continuities, and the vocabulary of the architect. Representative practices are contrasted with other methodological modes that stem from the organic, the decorative, the parametric, and the local. Works studied include those by architects, historians, literary/artistic figures, and theorists such as Perret, Garnier, Le Corbusier, Valéry, Nietzsche, Said, Calvino, Mies, Scully, Niemeyer, Kahn, Vidler, Frampton, and Eisenman. Limited enrollment. Karla Britton

3216a, Case Studies in Architectural Criticism 3 credits. This seminar focuses on issues that influence the way modern buildings and their architects are perceived by critics, scholars, and the public. The careers of such architects as Frank Lloyd Wright, Eero Saarinen, Louis Kahn, Philip Johnson, Robert Venturi, and Frank Gehry provide a framework for the examination of how patronage, fashion, social change, theory, finance, and politics affect the role of prominent designers and their work in the historical record. Readings include such critics as Lewis Mumford, Ada Louise Huxtable, Blair Kamin, Christopher Hawthorne, and Michael Kimmelman. Responding to lectures by the instructor and visitors, students develop criteria for judging architectural quality (program, site, “message,” details, etc.), and then apply those criteria in three brief analytical papers that build toward a 2,500-word research paper investigating the elements that contributed to the “success,” “failure,” or “reevaluation” of an individual building, an architect’s career, or a body of architectural work. All written assignments are reviewed in individual conferences with the instructor. Limited enrollment. Carter Wiseman

3217b, Writing on Architecture 3 credits. The goal of this course is to train students in the principles and techniques of nonfiction writing as it applies to architecture. The course includes readings from the work of prominent architects, critics, and literary figures, as well as reviews of books and exhibitions, opinion pieces, and formal presentations of buildings and projects. Class writing includes the development of an architectural firm’s mission statement, drafting proposals for design commissions, Web texts, and other forms of professional communication. The main focus of the course is an extended paper on a building selected from a variety of types and historical periods, such as skyscrapers, private houses, industrial plants, gated communities, malls, institutional buildings, and athletic facilities. Limited enrollment. Carter Wiseman

3218b, Sustainability for Post-Humans: Architectural Theories of the Environment 3 credits. This seminar poses posthumanist alternatives to the conceptual constraints
and aesthetic limitations imposed by static interpretations of sustainability. Posthumanism envisions radically different boundaries than those that have traditionally governed the interaction between politics, bodies, buildings, and the environment. Grounded in analysis of texts and case studies, the seminar investigates contemporary architectural responses to posthumanism’s challenge to identity, politics, and subject formation. Limited enrollment. Ariane Lourie Harrison

3220b, Contemporary Architectural Discourse Colloquium 3 credits. Organized by second-year M.E.D. students in collaboration with the director of the M.E.D. program, this year’s colloquium investigates the powerful yet often invisible roles of gender in the built environment. In public and private spaces, the gendering of spaces reinforces cultural norms and is therefore inscribed in the production of spaces. This colloquium asks students to consider how different spaces – exterior and interior – are organized and articulated to reflect and determine gender relations within the built environment. The course explores these notions of space through different media, specifically film, photography, and art, and against the larger background of activism, labor, class identity, and urban culture, among others. Through conversations with emergent theorists, historians, and practitioners, and engagement with different media, students are challenged to consider how gender politics are (re)produced across various cultural and physical landscapes, and how an excavation of gender might highlight potential for spatial or professional intervention. Limited enrollment. Eeva-Liisa Pelkonen

[3222b, Venice: Urban and Architectural Histories of a Maritime Republic 3 credits. This seminar explores Venice, a place where multiple histories of politics, commerce, religion, art, and science intersect, all of which presuppose a unique reciprocity of architecture and urban form. This course traces the genesis and development of the city from late antiquity to the present; investigates how political myth and urban reality are mutually implicated in the Piazza S. Marco, the Rialto, and the Grand Canal; and studies how singular forms of continuity and collective memory come together to shape the interaction of type and morphology. The seminar also examines the various formal, functional, and structural strategies that architects as diverse as Mauro Codussi, Jacopo Sansovino, Palladio, Scamozzi, Longhena, Frank Lloyd Wright, Le Corbusier, Gardella, Scarpa, and Eisenman have deployed when coming to grips with the singularity of Venice. The second half of the seminar analyzes the challenges faced by contemporary practices when trying to negotiate with the historical image of a city that remains uniquely resistant to change. The course ends by repositioning the Venice Biennale historically and ideologically in terms of the dialogue it has fostered between the contemporary culture of the spectacle and the diverse imperatives of historical understanding—a dialogue often compromised by multiple equivocations but also driven by the desire to renew the discipline that has Venice as a privileged focal point. Limited enrollment. Not offered in 2015–2016. Daniel Sherer]

3223a, Parallel Moderns: Toward a New Synthesis 3 credits. This seminar puts forward the argument that what many have accepted as the mutually exclusive discourses of tradition and innovation in the modern architecture of the first half of the twentieth century—respectively identified as the “New Tradition” and the “New Pioneers” by Henry-Russell Hitchcock in his Modern Architecture: Romanticism and Reintegration (1929)—in fact share common genealogy and are integral to an understanding of modern architecture as a whole. The seminar explores in depth key architects working in the “New Tradition” and goes on to explore its impact for postmodernity in the 1970s and 1980s. The possible emergence of a new synthesis of seeming opposites in the present is also considered. Limited enrollment. Robert A.M. Stern

3223b, Religion and Modern Architecture 3 credits. This seminar offers a fresh theoretical reading of the history of modern architecture through the lenses of realized religious buildings and sites. Intended to address how expressions of the ineffable are implemented materially and conceptually in a variety of cultural and urban contexts, the course is structured around a close comparative examination of pairs of iconic religious projects from 1921 to the present—temples, memorials, cemeteries, synagogues, monasteries, mosques, and churches. The comparisons probe issues of building type, spatial organization and circulation, material and structure, detailing and ornamentation, as well as philosophical, sociological, and cultural contexts. Students then deliver in-depth analyses of projects related to their own research interests for discussion and critique, and complete a graphic and written analytical record. This interdisciplinary and interactive course also draws guests from related fields to address such questions as: How can the concept of the “sacred” be understood in the twenty-first century, if at all? In what contexts is it intelligible? In a pluralist society, in which the spiritual is often experienced individually, how can architecture express communal identity or tradition? Architects discussed include Le Corbusier, Perret, Wright, Kahn, Breuer, Schwarz, Barragán, Niemeyer, Fathy, and Ando. Limited enrollment. Karla Britton

3226b, Lateral Strategies: Architecture and Activism 3 credits. This seminar researches architecture and activism. Some of the most radical changes to the globalization world are written not in the language of law and diplomacy but rather in the language of architecture and urbanism. The notion that there is a proper forthright realm of political negotiation usually acts as the perfect camouflage for consequential activity that resides in the unofficial currents of cultural and market persuasion. This seminar tutors spatial entrepreneurialism, impure ethical struggles, and a new species of spatio-political activism. In sequential weeks, the seminar considers these in relation to a topic and two thinkers. Activism and: piracy (Sloterdijk, De Certeau), comedy (Crichtey, Goffman), entrepreneurialism (Banham, Price), law (Agamben, Baehr), organization (Meyer, Castells), aesthetics (Ranciere, Bourriaud), polity (Mellalt, Latour), sovereignty (Habermas, Retort), violence (Virilio, Guattari), ethics (Badiou, Levinas). Limited enrollment. Not offered in 2015–2016. Keller Easterling]

[3228b, The Autobiographical House 3 credits. Architects and artists have long built dwellings for themselves (and for surrogate clients) as showcases of their art, sites of collecting and teaching, and as retreats from professional life. From Thomas Jefferson to Philip Johnson, from John Soane to Eileen Gray and Frank Gehry, building a house of one’s own often harks back to Renaissance models while experimenting with new manifestations of the architect’s evolving role. This seminar examines key examples of buildings as well as wide-ranging readings in autobiography. Limited enrollment. Not offered in 2015–2016. Kurt W. Forster]
[3230a, Universals 3 credits. The seminar explores the pleasures, perils, and potential productivity of architecture's love affair with, or faith in, systems of standards. From the belief that the proper combinations of geometry would actually generate transcendence in ecclesiastical architecture, to the various adoptions of a neoclassical language for the redemption of buildings or cities, to the modular systems that would allow modernism to rewrite the world, to the hidden mysteries of ISO's (International Organization for Standardization) supposedly rationalizing episodes, the alchemy of standards feature many architectural disciples. This seminar studies the ways in which the desire for standards has created isomorphic aesthetic regimes as well as productive renovations of construction and assembly. The seminar also explores the more expansive organs of decision-making that overwhelm and dictate to the architectural discipline, trumping the internal theories of design society with universal standards of much more consequence. While the seminar revisits familiar architectural theory, it also views some less-familiar episodes such as Eiffel's prefabricated cathedrals designed for distant French colonies, the origin of Sweets Catalog, the context of Konrad Wachsmann's modular systems, or ISO's control over everything from credit card thickness to construction industry protocols. As a true seminar, the first meetings are structured around collective readings and discussions, and the final meetings focus on individual research topics. Limited enrollment. Not offered in 2015–2016. Joel Sanders]

[3237b, Human/Nature: Architecture, Landscape, Technology 3 credits. Our global environmental crisis poses the challenge of devising a new model of ecologically responsible interdisciplinary practice that brings together two disciplines—architecture and landscape architecture—that have been professionally segregated at least since the nineteenth century. The first half of the term looks at this issue from a cultural and historical perspective, tracing the ideological origins of the architecture/landscape divide to another Western polarity—the false opposition between nature and culture, human and non-human—dualisms that are deeply rooted in Western literature, philosophy, popular culture, and even notions of gender and sexuality. The seminar explores how this way of thinking has impacted design practices in America from Frederick Law Olmsted in the mid-nineteenth century to Ian McHarg and Robert Smithson in the 1960s and 1970s. During the second half of the term the focus shifts to consider contemporary trends, examining the work of a diverse group of architects, landscape architects, and artists who have been undertaking groundbreaking projects that dissolve traditional distinctions between building and environment. Three converging design directions that unite this otherwise heterogeneous group—topography, bio-computation, and ecology—are identified, and the affinities and differences between them are discussed. Limited enrollment. Not offered in 2015–2016. Joel Sanders]

[3239b, Launch: Architecture and Entrepreneurialism 3 credits. This seminar studies the designer as entrepreneur. Contemporary entrepreneurs usually understand not only how to capitalize a business but also how to play market networks with the viral dissemination of both objects and aesthetic regimes. While the architecture profession has absorbed many of the technologies that markets use in their population thinking, practice is nevertheless structured to support architecture conceived as singular creations. This seminar considers both historical and contemporary moments in architectural and urban design when architects conceived of buildings, building components, or formats as repeatable products—products that, in the aggregate, may have the power to create an alteration to a local or global environment. Each week, the seminar considers the work of two or three architects together with texts that provide critical and theoretical inflection. The final project is a business/design-plan wherein students serve as each other's publicists. The architects/ firms considered in the first portion of the course include Burnham and Root; Alvar Aalto; McKim, Mead & White; John Nolen; Thonet designers; the RPAA (MacKaye, Stein, Wright, Bing, Mumford, Whitaker, Chase); Jean Prouvé; Victor Gruen; Morris Lapidus; Charles and Ray Eames; Case Study Houses; Buckminster Fuller; Cedric Price; Archigram; and Emilio Ambasz. In the second portion of the course, a growing number of contemporary examples, such as Chuck Hoberman, SHoP, TED designers, Kieran Timberlake, and Jürgen Mayer, are examined. Limited enrollment. Keller Easterling]

[3240a, Spatial Concepts of Japan: Their Origins and Development in Architecture and Urbanism 3 credits. The seminar explores the origins and developments of Japanese spatial concepts and surveys how they help form the contemporary architecture, ways of life, and cities of the country. Many Japanese spatial concepts, such as MA, are about creating time-space distances and relationship between objects, people, space, and experiences. These concepts go beyond the fabric of a built structure, and encompass architecture, landscape, and city. Each class is designed around one or two Japanese words that signify particular design concepts. Each week, a lecture on the word(s) with its design features, backgrounds, historical examples, and contemporary application is followed by student discussion. Contemporary works studied include those by Maki, Isozaki, Ando, Ito, SANAA, and Fujimoto. The urbanism and landscape of Tokyo and Kyoto are discussed. Students are required to make in-class presentations and write a final paper. Limited enrollment. Yoko Kawai]

[3245a, Architecture and Utopia 3 credits. This seminar examines the odd coupling of architecture and utopia: while utopias are properly imaginable, they architecturally occupy “no place”; while utopian thought demands social suppleness, architecture fixes people and places; while utopian philosophy is entirely speculative, architecture demands formal precision. What unites them is their shared occupation with power: they both satisfy the need for their originator to tell people how to live. The seminar also examines the very diverse ways in which utopias have been historically conceived, both in relation to what they are critiquing—social disorder and despotism, industrial degradation, capitalist hegemony—and in relation to how they are evaluated: Tafuri's scathing critique versus Jameson's admiration, for example. The first part of the seminar examines the historical, architectural projects that constitute our understanding and definition of “utopia.” The second part is devoted to contemporary examinations of the concept of utopia: texts and projects that extend the debate about the validity of the term in an age of globalization, technocracy, and virtuality. Students are asked to do weekly readings with written responses; an in-class presentation; and a 15-page paper elaborating on the presentation topic. Not offered in 2015–2016. Peggy Deamer]

[3248b, Schinkel and the Creation of a New Urban Topography 3 credits. The Berlin architect Karl Friedrich Schinkel, widely traveled in Europe and in close touch with
architects from France to Russia, England, and Italy, helped reshape the city of Berlin by means of numerous inserts and partial expansions, creating new types of public buildings, spaces, and parks. Schinkel’s pictorial invention—his panoramas, theaters, and residences—reconfigured the scenario of the city. This seminar attempts to grasp his ideas of topography, landscape, and culture at a time of swift transformation of the European city. Students are required to give in-class presentations and write a substantial paper. Limited enrollment. Not offered in 2015–2016. Kurt W. Forster]

[3253b, Critical Theory: Culture, Art, and Architecture 3 credits. This seminar examines the ideas of critical theory as handed down from the Frankfurt School (which gave us Critical Theory with a capital “C” and capital “T”) in the 1930s and transformed into a more general cultural theory of the 1980s and 1990s. The Frankfurt School critical theorists—concerned with elaborating Marx’s intimations of “superstructure” and analyzing the workings of culture within capitalism—were interested in how art, as a cultural production, operates as a system that can support or thwart, depending on its deployment, the workings of capitalism. Critical theory in the 1980s and 1990s operated as a broader critique of representation—often aligned with poststructuralism—but addressed the same issue of how cultural production subsumes and deflects capitalism. This seminar examines the question of architecture through the lens of art, which itself is examined through the lens of culture. Students are asked to present examples of contemporary art or architecture that function in a “critical” context, write weekly journals, and submit a fifteen-page paper. Limited enrollment. Not offered in 2015–2016. Peggy Deamer]

3257a, Techno-Sensations: Architecture, Technology, and the Body 3 credits. Information technologies and new media are radically changing the way people interact with one another in public and private space. The figure of the cyborg is no longer science fiction: biotechnologies and genetic engineering are blurring the line between human and machine. How will architects harness these and other technological innovations that enhance sensory perception to craft immersive environments that allow human bodies to traffic between virtual and actual space? This seminar explores the transformative impact of the digital revolution on architecture and the human senses. After exploring these contemporary developments through the lens of history and considering how the advent of audiovisual devices—from the camera obscura to the iPhone—have altered the design of the built environment and our sensory experience of space, the course speculates about the future. Topics include the symbiotic relationship between optics and the development of the camera obscura, the panorama, and the panopticon; the impact of cinema and television on the modernist window; the impact of plumbing and climate control on domestic hygiene; the birth of modern acoustics as a response to metropolitan noise; the influence of listening devices on the modern workplace; the impact of two generations of digital devices—desktop computers and mobile handheld devices—on human interaction in public and private space; and bionics, remote sensation, and the Internet of Things. Joel Sanders

[3259b, Architecture and Contemporary Labor 3 credits. This seminar examines both the practical and theoretical parameters that affect architectural labor today. On the theoretical side, texts are examined related to material/immaterial labor, the creative class, the performance of craft in the digital age, and the labor distinction between craft and design in architecture. On the practical side, students are asked to make surveys of architectural firms with regard to the following issues: Who does what work in the hierarchy of the office? What in this work is considered to have craft and/or design input? Who are considered to be designers? What work is given to consultants? What is outsourced and why? How is compensation determined for staff and consultants, and is it in relation to design and/or technical skills? Who manages the workflow? Is there a BIM manager, and what is that person’s background? In addition to the surveys, students are asked to write a fifteen-page paper that puts the course’s findings into an argument for redirecting contemporary architectural labor. Limited enrollment. Not offered in 2015–2016. Peggy Deamer]

3261a, Pedagogy and Place 3 credits. Preparatory to the spring 2016 exhibition celebrating the School’s one-hundredth anniversary, this research-based seminar examines the relationship between significant architectural pedagogies and the architectural buildings designed to accommodate them. Students are asked to document examples from the early nineteenth century to the present, combining class presentations, written texts, and graphic analyses that will form the basis of display panels to become part of the exhibit. Instructor’s lectures provide a historical overview of the topic as well as a detailed history of the Yale School of Architecture. Limited enrollment. Not offered in 2015–2016. Robert A.M. Stern]

3264b, XS: “micro” in Japanese Architecture and Urbanism 3 credits. This seminar focuses on recent trends in Japanese architecture and design culture over the past twenty years that developed since the bursting of the bubble economy and the architectural excess it enabled. The course looks at architectural, urban, and aesthetic concepts that embrace the diminutive. Topics include the contemporary Japanese house, micro-urbanism, return to nature movements, and concepts of both the cute and monstrous. These are explored through a series of lenses that engage tradition, pragmatism, sustainability, gender, and nationalism. The seminar requires readings and class discussion as well as an independent research project that culminates in a presentation and a paper. Limited enrollment. Sunil Bald

3265a, Architecture and Urbanism of Modern Japan: Destruction, Continuation, and Creation 3 credits. This course examines how design philosophies and methodologies were developed in Japanese architecture during the 130-year period from the Meiji Restoration until the postmodern era. Special attention is paid to the process of urbanization through repeated destructions and the forming of cultural identity through mutual interactions with the West, both of which worked as major forces that shaped architectural developments. Highlighted architects include Chuta Ito, Goichi Takeda, Frank Lloyd Wright, Kameki Tsuchiura, Sutemi Horiguchi, Kunio Maekawa, Kenzô Tange, Arata Isozaki, Fumihiko Maki, Kisho Kurokawa, Kazuo Shinohara, Tadao Ando, and Mirei Shigemori. Historical photos and excerpts from films are used to better understand context. Students are required to make in-class presentations and write a final paper. Limited enrollment. Not offered in 2015–2016. Yoko Kawai]

3266b, Building China Modern 1919–1958: Experiments for a New Paradigm 3 credits. The search for an architecture that is both Chinese and modern has been under way for more than a hundred years. At the beginning of the last century, many were looking
for just such a new language of building—one that could be both culturally specific and international. China started this grappling early, and it continues to this day. This architectural quest has run parallel to radically changing ideas of what China and Chinese ought to represent. This seminar examines experiments in Chinese building during three important periods: around the May Fourth Movement (1919), during Nationalist China (1927–48), and in the inaugural years of the People’s Republic. Each period had its own distinct mindset, but in all of them the reimagining of Chinese architecture was considered of paramount importance. While this course reviews the “tradition” of Chinese architecture, its focus is on the “experiments” in changing it. Students research is concentrated on identifying and exploring case studies using primary resources located in Yale University’s deep research collections (e.g., Sterling Memorial Library’s periodical holdings and Manuscripts and Archives collections, along with the Divinity School’s records on China-based missions). Limited enrollment. Not offered in 2015–2016. Amy Lelyveld]

[3268b, Reinterpreting the Enlightenment: Order and Chaos in the Long Eighteenth Century 3 credits. This seminar studies the works of architects and artists from Nicolas Poussin and Claude Perrault to Jacques-Louis David and Claude-Nicolas Ledoux through the lenses of successive reinterpretations of the Enlightenment in the modern period. Conventional ascriptions of the “Age of Reason” (Ernst Cassirer, Emil Kaufmann) were thrown into question by post-World War II philosophers (Theodor Adorno, Max Horkheimer) and later by poststructuralist critics (Michel Foucault, Jacques Derrida); these critiques were countered by a new interest in typological form (Aldo Rossi, Bruno Fortier) that founded Neo–Rationalism on a reading of Enlightenment visions of city structure. The engaged historical interest in the reinterpretation of the French Revolution and its cultural effects (Maurice Agulhon, Mona Ozouf, Robert Darnton) together with a revived utopianism of the later 1960s opened the texts of Enlightenment architects, hitherto seen as “difficult,” to scrutiny with respect to the literary accomplishments of the late eighteenth century. More recently, the return to a study of the idea of “nature” in the work of Bruno Latour and Félix Guattari has stimulated a sense of the “modernity” of the Enlightenment’s views of the environment, for better or for worse. A fifteen-page paper that may be illustrated by graphic analyses is required. Limited enrollment. Not offered in 2015–2016. Anthony Vidler]

3269a, German Architecture since 1945 3 credits. This seminar examines architecture in the Federal Republic of Germany and in the German Democratic Republic with particular attention paid to the city of Berlin and to the issue of representing a nation through buildings designed by both foreigners and its own citizens. Architects explored include Rudolf Schwarz, Egon Eiermann, Hermann Henselmann, Hans Scharoun, Ludwig Mies van der Rohe, James Stirling, O.M. Ungers, Daniel Libeskind, Zaha Hadid, and SANAA. This is a reading seminar, with oral reports and a fifteen-page paper. Limited enrollment. Kathleen James-Chakraborty

3270a, New England Domestic Architecture: 1870–1910 3 credits. Sixty years after the publication of Vincent Scully’s The Shingle Style and the Stick Style, this seminar revisits architect-designed suburban and resort housing in late-nineteenth- and early twentieth-century New England. The role of the emergent architectural press in disseminating new approaches to these building types and of women in commissioning, decorating, and writing them is also addressed. This is a reading seminar, with oral reports and a fifteen-page paper. Limited enrollment. Kathleen James-Chakraborty

3271a, Babel 3 credits. Few buildings can claim a longer history of interdisciplinary influence than the Tower of Babel. This seminar studies the various arenas of Babel’s appropriation—archaeological, art historical, theoretical, philosophical, theological, ideological, military, linguistic, and literary—with an eye to understanding the multivalence of architectural ideas as they circulate within culture. The course pays particular attention to Babel’s dramatic reassertion under the conditions of modernity, as a marker both of aspiration and of doubt; and it aims to speculate on the Tower’s potential future. Weekly readings and assignments provide a foundation for in-class presentations and final research papers, either on an aspect of the appropriation of Babel itself, or on the trajectory of a comparable architectural figure. Papers that engage with the construction of contemporary architectural ideas are especially welcome. Limited enrollment. Kyle Dugdale

3272b, Exhibitionism: Politics of Display 3 credits. Since their inception in the eighteenth century, art museums—prestigious buildings commissioned by those who wield power and influence—have behaved like cultural barometers registering changing attitudes about the role cultural institutions play in society. Looking at museum buildings from the inside out, this seminar traces the evolution of this building type through an in-depth analysis of its key architectural elements: gallery, interstitial (circulation, assembly, retail) and infrastructure (security/climate control) spaces, and site. This seminar explores how the spatial and material development of these tectonic components both mirrors and perpetuates changing cultural attitudes about aesthetics, class, power, wealth, nature, leisure, gender, body, and the senses as seen through the eyes of artists, architects, critics, collectors, and politicians. Topics include gallery spectatorship from the Renaissance picture frame to the modernist white cube; shifting sites from palace to park to repurposed industrial structures; urban renewal, gentrification, and the postwar museum; starchitecture and the trophy museum; cruising: museums as social condensers to see and be seen; multimedia artistic practices and information technologies; and new typologies, such as biennials, art fairs, private collections, and retail hybrids. Limited enrollment. Joel Sanders

3273b, The Architectural Surface: Figure, Form, Ambiance 3 credits. This seminar examines and debates the theoretical controversies surrounding the material and conceptual properties of the architectural surface. The course is conceived as a series of case studies of buildings and projects, supported by readings in philosophy, psychoanalysis, and historiography, discussing the role of the surface historically and today. Themes include smooth and rough (Alberti, Giulio Romano); solid geometries (Ledoux, Boulée); historicist tableaux (Piranesi, Soane); frames and skins (Labrouste, Paxton); smooth and rough (Le Corbusier); containers and wrappings (Koolhaas, SANAA); topologies (Lynn, Schumacher). Following the presentations, students develop and present their own case studies. Doctoral and M.E.D. students in the seminar develop a research paper in the history, theory, and criticism of the surface with special attention to historiographical context. A fifteen-page paper, with appropriate graphic analyses, is required. Limited enrollment. Anthony Vidler
The following courses offered elsewhere in the University will fulfill the History and Theory elective requirement and may be taken with the permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1.5 credits.

AMST 42/b/ENGL 430/AM, American Culture and the Rise of the Environment U.S. literature from the late eighteenth century to the Civil War explored in the context of climate change. Development of the modern concept of the environment; the formation and legacy of key ideas in environmentalism; effects of industrialization and national expansion; utopian and dystopian visions of the future. Michael Warner

AMST 62A/623b/CPLT 62A, Working Group on Globalization and Culture A continuing collective research project, a cultural studies “laboratory,” that has been running since the fall of 2003. The group, made up of graduate students and faculty from several disciplines, meets regularly to discuss common readings, to develop collective and individual research projects, and to present that research publicly. The general theme for the working group is globalization and culture, with three principal aspects: (1) the globalization of cultural industries and goods, and its consequences for patterns of everyday life as well as for forms of fiction, film, broadcasting, and music; (2) the trajectories of social movements and their relation to patterns of migration, the rise of global cities, the transformation of labor processes, and forms of ethnic, class, and gender conflict; (3) the emergence of and debates within transnational social and cultural theory. The specific focus, projects, and directions of the working group are determined by the interests, expertise, and ambitions of the members of the group, and change as its members change. There are a small number of openings for second-year graduate students. Students interested in participating should contact michael.denning@yale.edu. Michael Denning

AMST 73/b/AFAM 763b/HIST 747b, Methods and Practices in U.S. Cultural History This sampling of U.S. cultural history from the early national period to the present is designed to unfold on two distinct planes. The first is a rendering of U.S. culture itself—a survey, however imperfect, of the major currents, themes, and textures of U.S. culture over time, including its contested ideologies of race and gender, its organization of productivity and pleasure, its media and culture industries, its modes of creating and disseminating “information” and “knowledge,” its resilient subcultures, and its reigning nationalist iconographies and narratives. The second is a sampling of scholarly methods and approaches, a meta-history of “the culture concept” as it has informed historical scholarship in the past few decades. The cultural turn in historiography since the 1980s has resulted in a dramatic reordering of “legitimate” scholarly topics, and hence a markedly different scholarly landscape, including some works that seek to narrate the history of the culture in its own right (Kassen’s history of the amusement park, for instance), and others that resort to cultural forms and artifacts to answer questions regarding politics, nationalism, and power relations (Melani McAllister’s Epic Encounters). In addition to providing a background in U.S. culture, then, this seminar seeks to trace these developments within the discipline, to understand their basis, to sample the means and methods of “the cultural turn,” and to assess the strengths and shortcomings of culture-based historiography as it is now constituted. Matthew Jacobson

CPLT 530A/635b, The Question of Form The concept of art in relation to form and deformation. Starting with Plato (The Republic), we then trace its echoes in modern literature (Keats, Shelley, Hardy, Kleist, Kafka) and film (Godard, Egoyan, Dreyer, Sun Zhou, Wong Kar-Wai). Carol Jacobs

CPLT 580A/GMAN 645A, Walter Benjamin and the Modernization of Nineteenth-Century Paris The radical modernization of Paris under the Second Empire (1851–70) as seen through the eyes of Walter Benjamin. Focus on Benjamin’s Arcades Project, a compendium that charted developments such as Parisian mass transit and streamlined traffic, the construction of apartment houses, and the dissemination of mass media. Readings from other literary texts on the same events include works by Balzac, Zola, and Aragon. Henry Sussman

CPLT 840A/FILM 840A/GMAN 652A/HSAR 687A/RUSS 712A, Moscow/Berlin: Leftist Avant-Gardes and Interwar Modernism From 1918 to the mid-1930s, Moscow and Berlin were central gathering points for left-wing modernists. Each city developed its own modes of modernism, yet in sustained dialogue, given massive Russian emigration to Berlin after 1918, the Weimar obsession with early Soviet aesthetics (and cinema), intellectuals traveling in both directions, and the large-scale emigration of German leftists to the Soviet Union after 1933. And in the late 1940s and ’50s, Soviet intellectuals (and German emigrants returning from Moscow) shaped a “late modernism” in East Berlin. Centered on literature and film, the course also considers a wide array of art forms (including painting, photography, architecture, music, and aesthetic theory). Works by modernists such as Eisenstein, Padovkin, Vertov, Nabokov, Shklovsky, El Lissitzky, Rodchenko, Malevich, Tretiakov, Lukács, Moholy-Nagy, Benjamin, Brecht, Richter, Beckmann, Grosz, Heartfield, Höch, Lang, Döblin, Ruttmann, Mies van der Rohe, Eisler, Busch, Konrad Wolf, Peter Weiss. Katerina Clark, Katie Trumpener

ENGL 730B, Literature and Ecology in the Eighteenth Century This is a course on three varieties of ecological representation during the long eighteenth century: countryside, city, and imperial periphery. We look at the role of several major literary genres—georgic, loco-descriptive, satire, the novel, the essay, epic, travel writing—in constituting a sense of place and environment, through developing ideas of landscape, wilderness, or the garden, of stranger sociability and urban publicity, and of the exotic or oceanic or savage. We pay particular attention to the connection between form and phenomenology in the depiction of ecological surround. Writers include Dryden, Wytherley, Rochester, Behn, Addison, Gay, Defoe, Ward, Swift, Haywood, Fielding, Pope, Cook, Boswell, and Burney, read alongside theory and history from Foota Williams to the Anthropocene. Jonathan Kramnick

FILM 312A/LITR 354A, Theory of Media Introduction to key issues in media studies. Relationships between commodity, artwork, and networks of exchange; media and
FILM 612a, Technical Images: Transformations of Visuality in the Digital Era The seminar explores the new forms of vision elicited by the so-called technical images, as first defined by Vilém Flusser at the dawn of the digital revolution. The first part of the seminar is devoted to a close reading of the authors who have been more sensitive in capturing the ongoing transformation of images. The second part discusses the main character of new visuality, like fragmentation, tactility, performativity. The seminar ends with a mention of a possible “archaeology” of new forms of visions. Francesco Casetti

FILM 615b, Mediascapes: Toward a Media Ecology The possibility of accessing media everywhere and all the time gives us the illusion of being emancipated from any temporal or spatial constraint. And yet, if it is true that images, sounds, and words circulate (apparently) without any restriction, it is also true that they always “land” somewhere. We experience them in an environment—at home, in a public square, on a train, in a classroom, even in the “personal bubble” in which we shelter. Messages, as well as the media that deliver them, are always located. This seminar explores the subtle relations between media and their surroundings: in particular, the way in which they develop a reciprocal influence, merge, and co-evolve (including the capacity of the media to become environments in themselves). The concept of mediascape reflects these processes and dynamics. Francesco Casetti

HSAR 252a/ARGC 252a/CLCV 175a, Roman Architecture The great buildings and engineering marvels of Rome and its empire. Study of city planning and individual monuments and their decoration, including mural painting. Emphasis on developments in Rome, Pompeii, and central Italy; survey of architecture in the provinces. Diana Kleiner

HSAR 273b, Art of Gothic Cathedrals European Gothic churches (1140–1400) explored for their formal and material qualities and as sites of ritual performance and signs of political and social power. Recommended preparation: HSAR 112. Jacqueline Jung

HSAR 281b, Visual Arts in the Age of Reason Visual arts of the seventeenth and eighteenth centuries. Focus on how the arts were an essential component of the so-called Age of Reason, synonymous with the Age of Enlightenment. Nicola Sthor

HSAR 310b/HUMS 270b, Futurism: The Shock of the New Cultural and intellectual shifts in literature, philosophy, and the arts at the end of the nineteenth century, marking the rise of modernism. Futurism, surrealism, and other avant-garde movements that transformed into art the dramatic challenges of a new technological and psychological reality. Amerigo Fabbi

HSAR 357a or b, Art and Architecture of Japan Survey of Japanese art and architecture from earliest times through the early nineteenth century. Introduction to paradigmatic monuments, with a focus on programmatic multimedia ensembles as found at Buddhist temples, Shinto shrines, Zen monastic enclaves, military installations and castles, vernacular living spaces, and public institutions of governance. Mimi Yiengpruksawan

HSAR 374a/AFAM 189a, Black Art and Material Culture in Early Modern America This course engages histories of black representation and artistic production by black people in the United States from the colonial period through the Harlem Renaissance. It offers a comprehensive overview and critique of black expressive forms across media, in relation to mainline discourses of American art and within the context of American economic, cultural, social, and political histories. Erica James

HSAR 401a or b, Critical Approaches to Art History A wide-ranging introduction to the methods of the art historian and the history of the discipline. Themes include connoisseurship, iconography, formalism, and selected methodologies informed by contemporary theory. Staff

HSAR 469b/FILM 403, Filmscapes: The Art of Artifice An intensive survey of filmic design. Themes include the credit sequence, art deco and the “Paramount look,” the historical film, the near future, the monumental landscape, the explicitly artificial world, and the virtualization of production design. J.D. Connor

HSAR 569a/ARGC 569a/CLCV 868a, Living the Life of Nero: Megalomania and Making Great Art Nero is Rome’s most infamous emperor. Played with gusto by Peter Ustinov in Quo Vadis, Nero personifies Roman leadership at its most tyrannical. Nonetheless, the Roman Age of Nero witnessed an extraordinary efflorescence of art and architecture that set the stage for Rome’s magisterial second century. Furthermore, in a society in which few names of artists and architects were recorded, the work of those of Nero’s era (Severus, Celer, Fabullus, Zenodorus) is well documented and enhanced by new archaeological discoveries. Student projects focus on the fabled Domus Aurea, the alleged Tomb of Nero, Third- and Fourth-Style Roman wall painting, the legendary Colossus of Nero, and other Neronian portraiture. The commissioning of art by powerful elite Roman women and freedmen in the Neronian age is also explored, and there is emphasis on the possible correlation between megalomania and great art. Qualified undergraduates who have taken Roman Art: Empire, Identity, and Society and/or Roman Architecture may be admitted with permission of the instructor. Diana Kleiner

HSAR 606a, A Global Renaissance This seminar focuses on current scholarship that posits the connected nature of maritime cultures of the Indian Ocean and the Mediterranean Sea. Looking from the perspectives of both Europe and the Islamic world, the seminar considers the mobility of ideas and objects and the communities of merchants, artists, and scholars who traveled from Japan to England to the Americas. The mobility brought about profound cultural changes that were reflected and augmented by changes in the urban, architectural, and artistic productions of this period. Kishwar Rizvi
HSAR 679b, Re-Reading Ruskin  What is the role of art in a capitalist society? How does the artistic production of an era reflect its social, economic, and moral conditions? What is the relationship between mankind and nature or the environment? How does the workman relate to the products of his labor? How can beauty be defined and understood? What is the place of religion in social and aesthetic thought? What do we mean by truth in relation to visual representation? These are among the questions that preoccupied John Ruskin, one of the preeminent figures of the nineteenth century, yet one whose work raises significant issues for our own time. The course aims to provide a full overview of Ruskin's significance, across a wide disciplinary and historical terrain, in the light of recent critical responses to his work. Far from being merely an art critic, Ruskin was a figure whose impact was felt across the fields of art history, aesthetic theory, museology, theology, architectural history and practice, literature, social criticism, politics, economics, geology, botany, climatology, and every aspect of Victorian life. His prose works run to thirty-nine large volumes, and his voluminous correspondence and diaries fill many more. Gifted as a draftsman, he produced a large corpus of watercolors and drawings. The class examines the many facets of Ruskin's work, aiming to place each in historical context while also exploring the relevance of his ideas for our contemporary world. The class concludes with a study trip to the UK and Venice. Enrollment limited. Prerequisite: permission of the instructor. Timothy Barringer

HSAR 725b/AMST 806b/RLST 701b/WGSS 765b, Studies in “New” Materialities: Agency, Ontology, Embodiment, Cognition  This advanced research course invites students to engage and interrogate a set of “new” ideas about objects and materiality emerging in disciplines as far-ranging as political science, cultural anthropology, ethics, history of art, cognitive science, religious studies, and gender and sexuality studies. One concern is to explore how these ideas, far from being “new,” have a deep, and deeply political, history in relation to Western efforts to make sense of and order the material (and spiritual) world and to mark and distinguish Western modernity and “civilization.” In the second half of the term, research projects take the shape of applying some of these theoretical models to case studies concerning specific objects, bodies, and materials. Note that a course on the same subject is being offered simultaneously at another institution, with students and professors in both courses entering into various sorts of conversation during the term. Sally Promey

HSAR 731b/JDST 692b/RLST 798b, Witnessing, Remembrance, Commemoration  Memory and its expressions structure and inform many aspects of contemporary visual culture. This seminar pursues readings about memory and witnessing chosen from among the works of such writers as Sigmund Freud, Albert Camus, Frances Yates, Maurice Halbwachs, and the authors of the Book of Genesis, as well as writings about commemoration by James Young and Pierre Nora, among others. Discussions apply these readings to the study of witnessing and memorializing as artistic practices, and examine visual realizations of such works, including some monuments and memorials near campus, but with a nonexclusive emphasis on Jewish examples, such as videos in the Fortunoff archive. Student projects center on theory or on special cases of witnessing or commemoration, ritual, memorial practice, and monuments, whether built, written, aural, electronic, or played out on the streets. Margaret Olin

HSAR 785a/AFAM 580a, Cross-Cultural Aesthetics: From Hybridity to Transculturation  Examines theories and methods in the reception of early-twentieth-century African American modernism, mid-twentieth-century studies of Caribbean art and culture, and black Atlantic art from the 1980s onward, addressing concepts of hybridity, creolization, syncretism, translation, and transculturation in the analysis of visual arts. Kobena Mercer

HSAR 801b, Time and Space in Buddhist Art  Each religion has its own cosmology with a unique concept of time and space. The concept of time and space developed by East Asian Buddhists was related to, but distinct from, the Buddhist tradition of the religion's home country of India, and it resulted in the birth of a new type of art and architecture in China, Korea, and Japan. Through exploration of East Asian Buddhist art, this course examines how East Asian Buddhists understood human life and death in the cycles of time and space, how they mapped hell and paradise in the cosmos, and how they attempted to visualize their perception of time and space in their art and architecture. In a larger context, the course examines the relationship among image, text, and practice in East Asian Buddhism through comparative readings of visual images and texts. By the end of the term, students achieve an understanding of how the East Asian Buddhist view of the cosmos gave birth to various types of visual arts, and how those visual materials in turn influenced religious practices and experience. Youn-mi Kim

HSAR 809a, Architecture and Audacity in Japan  The architectural history of Japan is marked by occasional virtuosities of such scale and imagination, such as the Ise Shrine, as to defy the very traditions and practices whence they emerged. Such productions might be called audacities, in the sense that they engaged—beyond technological prowess and economic wherewithal—a visionary boldness that came close to achieving the impossible. This seminar explores the notion of the audacity and the impossible by examining some of Japan's acclaimed architectural productions, including the tomb of King Nintoku, the Ise Shrine, Tōdai-ji Daibutsuden, the Byōdō-in Phoenix Hall, Itsukushima Shrine, Chūsonji Konjikido, Kinkaku-ji, Himeji Castle, Rikyū's Taian, Ninomaru Palace, Katsura Rikyū, and Tōshō-gū. Mimi Hall Yiengpruksawan

HSHM 422a/HIST 467Ja, Cartography, Territory, and Identity  Exploration of how maps shape assumptions about territory, land, sovereignty, and identity. The relationship between scientific cartography and conquest, the geography of statecraft, religious cartographies, encounters between Western and non-Western cultures, and reactions to cartographic objectivity. Students make their own maps. No previous experience in cartography or graphic design required. William Rankin

HUMS 400a/FREN 399a/PLSC 316a, Modernities  An interdisciplinary study of philosophy, social thought, and some key literary works connected to two moments of modernity—the Enlightenment and the period of the “great upheaval” (1870–1915). R. Howard Bloch and Steven Smith

HUMS 444b, The City of Rome  An interdisciplinary study of Rome from its legendary origins through its evolving presence at the crossroads of Europe and the world. Exploration of the city's rich interweaving of history, theology, literature, philosophy, and the arts in significant moments of Roman and world history. Virginia Jewiss
HUMS 453b/ENGL 414b, Utopia An examination of utopian fiction. Focus on works from early modern England, with some attention to more recent utopian writings. The genre's Platonic origins, its ties to early modern political philosophy, its role in the rise of the novel, and its legacy in science fiction. Utopian literature's abiding concern with issues of social discipline, religion, education, science, marriage, and sex. John Rogers

NELC 514a, Buried Cities: Thera, Pompeii, and Herculanenum Study of three ancient cities buried by volcanic eruptions—Thera in ca. 1630 B.C.E. and Pompeii and Herculanenum in 79 C.E.—with emphasis on their architecture, wall paintings, and small finds in cultural and historical context. Karen Foster

PHIL 617b/JDST 651b, Critical Theory and the Frankfurt School This course is an introduction to the thought and writings of the philosophers known as the Frankfurt School, who founded and developed the idea of Critical Theory. Taken in its original meaning as a method or even a practice, rather than a systematic theory, Critical Theory suggests a way of thinking about the interrelations between philosophy and society, culture and politics, and on the complex relation between philosophical concepts and social reality. By reading key texts of Frankfurt School authors such as Adorno, Horkheimer, Marcuse, Benjamin, Kracauer, and Fromm, the course inquires into the meaning of concepts such as critique, history, freedom, individuality, emancipation, and aesthetic experience. Asaf Angermann

RLST 692a/AMST 812a/REL 981a, Visual Controversies: Religion and the Politics of Vision This interdisciplinary seminar explores the destruction, censorship, and suppression of pictures and objects, as these acts have been motivated by religious convictions and practices, in medieval Europe and then in the United States from colonization to the present. In such episodes, religion does not operate in a vacuum but draws attention to other cultural pressure points concerning, for example, race, ethnicity, gender, and sexuality. Already in the third century in Europe, and as early as the seventeenth century in the geographic area that is now the United States, individuals and groups practiced a range of behaviors we might meaningfully, though often figuratively, label iconoclastic. This course focuses most specifically on the emergence of Christian art and architecture in dialogue (or competition) with Greco-Roman religions and Islam; and on variations of Protestant Christianity; while it also directs attention to case studies within Byzantine Orthodoxy, American Judaism, Islam, and Catholicism and looks to comparative situations and episodes of contention elsewhere in the world. Topics likely considered include the conversion of “pagan” temples into Christian churches in late antiquity; iconoclastic interventions on Christian floor mosaics in Palestine after the Muslim conquest; destruction of images during Byzantine Iconoclasm; attitudes toward images during the Protestant Reformation; American Puritan use of a theology of figuration to justify genocide as an “iconoclastic” act in the Pequot War; Shaker constructions of elaborate visionary pictures as forms of “writing” rather than “art”; sculptor Rose Kohler’s determination to define and regulate “Jewish art” in her work with National Council of Jewish Women; recent adjudication of the public display of the Ten Commandments or Christian nativity scenes; the Western contexts of the destruction of the Bamiyan Buddhas; and international culture wars and the specific uses of “blasphemy” charges to restrict the visual practices of religions. Prerequisite: permission of the instructors. Sally Prome, Vasilios Marinis

URBANISM AND LANDSCAPE
Andrei Harwell and Alan Plattus [F], Elihu Rubin [Sp], Study Area Coordinators

In this study area, a broad range of courses explore the aesthetic, economic, social, and political influences on the spatial form of urban places and the urban, suburban, and rural landscapes that form our design ecology.

For the M.Arch. I program, required courses in this study area include an introduction to urban design (4011b), an introduction to planning and development (4021a), and the satisfactory completion of one of the elective seminar courses from this study area. Note that the elective course 3237b will fulfill the Urbanism and Landscape elective requirement, although it cannot fulfill both the History and Theory and the Urbanism and Landscape elective requirements. Courses offered outside the School not listed below may fulfill this elective requirement provided permission from the study area coordinators has been granted.

Required Courses

4011b, Introduction to Urban Design 3 credits. (Required in M.Arch. I first year, spring term.) This course is an introduction to the history, analysis, and design of the urban landscape presented with weekly lectures and discussion sections. Emphasis is placed on understanding the principles, processes, and contemporary theories of urban design, and the relations between individual buildings, groups of buildings, and the larger physical and cultural contexts in which they are created and with which they interact. Case studies are drawn from New Haven and other cities. Elihu Rubin

4021a, Introduction to Planning and Development 3 credits. (Required in M.Arch. I second year, fall term.) This course demonstrates the ways in which financial and political feasibility determine the design of buildings and the character of the built environment. Students propose projects and then adjust them to the conflicting interests of financial institutions, real estate developers, civic organizations, community groups, public officials, and the widest variety of participants in the planning process. Subjects covered include housing, commercial development, zoning, historic preservation, parks and public open space, suburban subdivisions, and comprehensive plans. Alexander Garvin

Elective Courses

4211b, Intermediate Planning and Development 3 credits. This seminar examines the interaction of property development and planning with local market conditions, financing alternatives, government policy, and the political context at the community level. During the first part of the term, students learn how to analyze a specific neighborhood (in New York City) by using fundamental planning techniques and examining national trends within that neighborhood. Topics include housing, retail, and office development; zoning; historic preservation; transportation; business improvement districts; and building reuse and rehabilitation. In the second part of the term students prepare recommendations for the neighborhood that will meet the conflicting interests of financial institutions, real estate developers, civic organizations, community groups, public officials, and a wide variety of participants in the planning and development process. The end product is a printed book presenting the results of their work. Prerequisite: 4021a, STCY 176b, or equivalent course work. Limited enrollment. Alexander Garvin
4214a. Built Environments and the Politics of Place 3 credits. Call it the built environment, the vernacular, everyday architecture, or the cultural landscape, the material world of built and natural places is intricately bound up with social and political life. This research seminar explores research methods and sources for writing the history of the built environment, such as maps, aerial and ground photographs, planning documents, landscape analysis, and GIS. The course includes readings from history, geography, anthropology, and architecture as well as readings on narrative and graphic strategies for representing spaces and places. Students present papers. Sections from longer theses or dissertations in progress are welcome. Limited enrollment. Elihu Rubin

4216a. Globalization Space: International Infrastructure and Extrastatecraft 3 credits. This lecture course researches global infrastructures as a medium of transnational policy. Lectures visit the networks of trade, communication, tourism, labor, air, rail, highway, oil, hydrology, finance, and activism. Case studies travel around the world to, for instance, free trade zones in Dubai, IT campuses in South Asia, high-speed rail in Saudi Arabia, cable/satellite networks in Africa, highways in India, a resort in the DPRK, golf courses in China, oil-financed development in Sudan, and automated ports. These investigations begin in transnational territory where new infrastructure consortia operate in parallel to or in partnership with nations. Not only an atlas or survey of physical networks and shared protocols, the course also considers their pervasive and long-term effects on policy and culture. Infrastructures may constitute a de facto parliament of global decision making or an intensely spatial extra statecraft. Each week, readings, with both evidence and discursive commentary, accompany two lectures and a discussion section. A short midterm paper establishes each student’s research question for the term. A longer final paper completes the requirements of the course. Limited enrollment. Not offered in 2015–2016. Keller Easterling

4219b. Urban Research and Representation 3 credits. Every day, architects and urban designers make proposals that shape the public and private realms of the city. This seminar sets out to contextualize the social and political ramifications of these interventions; to intensify the designer’s tool kit of deep, sociohistorical research of site and place; and to cultivate a reflexive practice that considers seriously the social responsibilities of both the architect and the urban researcher. In the classroom, and in the field, this seminar introduces a diverse set of methods for studying the urban environment, from the archival and visual to the observational and ethnographic. Limited enrollment. Not offered in 2015–2016. Elihu Rubin

4221a. Introduction to Commercial Real Estate 3 credits. This seminar introduces commercial real estate. It does not require any prior knowledge of finance, accounting, or taxation policies. Commercial real estate is income-producing property that is built, financed, and sold for investment. This course examines five basic types of commercial real estate (office, industrial, retail, multifamily, and hotel) from the standpoints of the developer, lender, and investor. Principles of location, financing, timing of market cycles, leasing, ownership structure, and external factors are explored. Students are expected to evaluate assets, partnership interests, and other positions such as debtor interests through valuation measurement, which requires the use of some simple mathematics. An HP-12C calculator or laptop computer with Excel for use in class is required. Students also examine commercial deeds, leases, partnership agreements, and other legal documents. Each student selects a building or development site within New Haven County for a due diligence analysis of zoning, real estate taxes, deeds, liens, market supply and demand, projected income and expenses, and availability of debt. In addition to out-of-class assignments, a brief exercise is included during each class. Limited enrollment. Kevin D. Gray

4222a. History of Landscape Architecture: Antiquity to 1700 in Western Europe 3 credits. This course presents an introductory survey of the history of gardens and the interrelationship of architecture and landscape architecture in Western Europe from antiquity to 1700, focusing primarily on Italy. The course examines chronologically the evolution of several key elements in landscape design: architectural and garden typologies; the boundaries between inside and outside; issues of topography and geography; various uses of water; organization of plant materials; and matters of garden decoration, including sculptural tropes. Specific gardens or representations of landscape in each of the four periods under discussion—Ancient Roman, medieval, early and late Renaissance, and Baroque—are examined and situated within their own cultural context. Throughout the seminar, comparisons of historical material with contemporary landscape design are emphasized. Limited enrollment. Bryan Fuermann

4223b. History of British Landscape Architecture: 1600 to 1900 3 credits. This seminar examines chronologically the history of landscape architecture and country-house architecture in Britain from 1600 to 1900. Topics of discussion include Italian and French influences on the seventeenth-century British garden; military landscaping; the Palladian country house and British agricultural landscape; Capability Brown’s landscape parks; theories of the picturesque and of the landscape sublime; Romanticism and the psychology of nature; the creation of the public park system; arts and crafts landscape design; and the beginnings of landscape modernism. Comparisons of historical material with contemporary landscape design, where appropriate, are made throughout the term. The collection of the Yale Center for British Art is used for primary visual material, and a trip to England over spring break, partially funded by the School, allows students to visit firsthand the landscape parks studied in this seminar. Limited enrollment. Bryan Fuermann

4226a/FRES 888a, Ecological Urban Design 3 credits. This course lays the groundwork for students from the School of Architecture and the School of Forestry & Environmental Studies to collaboratively explore and define ecologically driven urban design. The goal is to work as an interdisciplinary group to cultivate a perspective on the developing field of urban ecology and approaches to implementing urban ecological design. The transformation of urban ecology from a role in studying a system to studying and shaping urban ecosystems is a primary focus for the course. The course concentrates on the following questions: How do we define urban ecosystems? How do we combine science, design, and planning to shape and manage urban ecosystems? How do we implement effective and adaptable experimental and monitoring methods specific to urban sites and human subjects in order to conduct viable urban ecological research? The course uses the Earth Stewardship Initiative, a large land-planning project developed for the Ecological Society of America in Sacramento, Calif., to create a real-world project where interdisciplinary studies can be engaged.
teams can work to combine ecological applications and design with the goal of shaping urban systems to improve the ecological, social, and infrastructural function of city components. Limited enrollment. Alexander Felson

[4229a, Disurbanism: Critical Readings on the Contemporary City 3 credits. The seminar examines critical readings and projects associated with what is loosely called “Disurbanism,” borrowing from the original visions of the Soviet avant-garde, in order to explore both the utopian and dystopian aspects of these writings and works. The course analyzes how the prospects of an attenuated and diffuse urbanism have shifted from a utopian critique of both the bourgeois and early capitalist industrial cities to the requirements for a redefinition of City itself as it has evolved into a vast metropolitan network enabled by the automobile and electronic media. Disurbanism’s dystopian incarnation, the disappearance of the City, and the subsequent account of the loss of cultural values and the critical discourse surrounding a denatured aesthetics of the sublime are also explored. Students are expected to present material and participate in discussions of the readings as well as submit a final paper. Limited enrollment. Not offered in 2015–2016. Edward Mitchell]

[4230a, Topics in Chinese Landscape, Architecture, and Urbanism 3 credits. This seminar introduces major themes in the history and theory of the Chinese built environment in relation to the core typologies of Chinese architecture and the history of the city of Beijing. Specific buildings, gardens, and junctures in the city’s development (important historical, cultural, and architectural markers) are used as an armature for building a layered understanding of this city both as it was, is now, and is fast becoming. Topics considered include: Beijing as the apotheosis of the walled imperial city type, the identification and mapping of this system’s persistent structures, the module of the courtyard and the many scales at which it is used in the traditional city (house, temple, city), the garden, pre-1949 Western and Republican influences on the city, post-1949 formations of home and city, the structures of contemporary Beijing, as well as the issues impacting Beijing’s future. Limited enrollment. Not offered in 2015–2016. Amy Lelyveld]

[4231b, City-Making on the Arabian Peninsula 3 credits. From eighth-century Baghdad to twenty-first-century Masdar, the Middle East has been approached, from within and without, as a susceptible terrain for creating cities. This seminar considers the histories and mythologies of city-making on the Arabian Peninsula, focusing on urban planning since the early twentieth century. Modern city-making is discussed as a globally induced building boom, delivered by figures like American oil men in Saudi Arabia and Sir Norman Foster in Abu Dhabi. A regional survey includes an inspection of Gulf cities (Abu Dhabi, Aramco company towns, Doha, Dubai, Jubail, Kuwait, and Riyadh) and their earliest attempts at modern urbanization. Arising themes and particularities are discussed. Historical context, mostly in the first half of the term, provides students the means to analyze forces and ideologies shaping the newest cities and mega-projects in the region and beyond. The course is not so much a geographical study as an investigation of the pervasive contemporary forces in urbanism and globalization. Whenever possible, the week’s discussions focus on a particular Gulf city as the exemplification of chosen themes. Beyond just sociology and urbanism, reading and discussion materials include primary historical documents and historical and contemporary journalism. Limited enrollment. Not offered in 2015–2016. Todd Reisz]

4233b, Ghost Towns 3 credits. This is an advanced, interdisciplinary seminar in architectural history, urban planning, vernacular building, the politics of preservation, collective memory, tourism, and, ultimately, urban sustainability. Looking at a broad spectrum of failed or almost-failed cities in the United States and across the globe, this seminar uses the ghost town and its rhythms of development and disinvestment to establish a conceptual framework for contemporary urban patterns and processes. Students develop skills in urban and architectural research methods, visual and formal analysis, effective writing, and critical reasoning. Limited enrollment. Elihu Rubin

[4234b, Residential Design, Development, and Management 3 credits. This seminar examines the creation and evolution of residential housing in the United States over the past century. Individual sessions are devoted to a critical and in-depth review of housing types and their development in both urban and suburban environments and to the exploration of the architectural, financial, legal, marketing, and social issues involved in the creation, management, and maintenance of housing. The seminar includes scheduled visits to specific examples of for-profit, nonprofit, and government-developed residential properties where students meet and speak with the designers and developers responsible for the building’s construction and management. Prerequisite: 4021a, STCY 176b, or the equivalent. Limited enrollment. Not offered in 2015–2016. Alexander Garvin, Ryan Salvatore]

4235b, Credentials: The Professions of Urbanizing 3 credits. As the close of the 1960s found cities in Europe and North America designed into obsolescence, urbanization unfurled with conviction in other parts of the world. The following decade could have been an era of true global expansion for the architectural and planning professions; however, there are many examples of where they were dismissed in favor of other enterprises, namely large-scale engineering companies and so-called technical and management service providers. The products of these urbanizing professions set in motion the global rules for and expectations of modern notions of the city. This seminar identifies and pursues case studies of expansive infrastructural projects in such places as Turkey, Pakistan, Iran, Iraq, Saudi Arabia, and the United Arab Emirates. Through these case studies, students seek out the credentials and historical tracks of performers who have delivered urbanization. The early part of the term focuses on a core set of readings that help shape the seminar’s themes; thereafter, weekly research assignments develop toward a final collaborative production to be defined through the course of the term. Limited enrollment. Todd Reisz

4236a, Poets’ Landscapes 3 credits. Introduction to techniques poets have used to ground their work in the landscapes and buildings of American towns and cities, including Chicago, New York City, and Los Angeles. Attention to poems from a national automotive landscape as well as narrative poems about cities. Writing exercises include short essays and exercises in various poetic forms; readings from the works of Dickinson, Frost, Bishop, Lowell, Wilbur, Dickey, Pinsky, Cervantes, and Merrill. Limited enrollment. Dolores Hayden

4238a, Participation in Diverse Communities: Strategies for Anchoring Cultural and Public Spaces 3 credits. As Charles Jencks and sociologist Herbert Gans have pointed out, architects have to deal with pluralism and widely differing taste-cultures. Of
particular concern is the generation of meaning in architecture, especially for constituent communities that are often ethnically diverse. This case study seminar analyzes examples of cultural and public spaces in Asia, Africa, South America, Europe, and the United States that have involved local participation in their creation and, in some cases, in their ongoing space making. By examining specific cultural strategies and resulting artifacts, the seminar attempts to identify a wide range of responses and strategies that can be used to generate cultural buildings and public spaces broadly understood in their communities as places of meaning. Analyses include methods of eliciting user feedback during and after the design process and the degree of acceptance by the public that engages it. Each student picks one structure or space and presents it to the class, analyzed through diagrams, images, models, and text. A fifteen-page paper is required. Limited enrollment.

Sara Caples

4299a or b, Independent Course Work 3 or 6 credits. Program to be determined with a faculty adviser of the student's choice and submitted, with the endorsement of the study area coordinator, to the Rules Committee for confirmation of the student's eligibility under the rules. (See the School's Academic Rules and Regulations. Available for credit to fulfill the M.Arch. I Urbanism and Landscape elective requirement with the approval of the study area coordinators.)

The following courses offered elsewhere in the University will fulfill the Urbanism and Landscape elective requirement and may be taken for credit with the permission of the instructor. Unless otherwise indicated, at the School of Architecture full-term courses are typically assigned 3 credits; half-term courses are assigned 1½ credits.

AFAM 772a,b/SCCY 630a,b, Workshop in Urban Ethnography The ethnographic interpretation of urban life and culture. Conceptual and methodological issues are discussed. Ongoing projects of participants are presented in a workshop format, thus providing participants with critical feedback as well as the opportunity to learn from and contribute to ethnographic work in progress. Selected ethnographic works are read and assessed. Elijah Anderson

AFAM 850b/ENGL 937b, African Urban Cultures: Mediations of the City This course approaches the study of African cities and urbanization through the medium of diverse texts, including fiction, nonfiction, popular culture, film, and the arts, as well as scholarly work on African cities. Through these cultural “texts,” attention is given to everyday conceptualizations of the body and the environment, as well as to theoretical engagements with the African city. We study urban relationships as depicted in literature and popular media in relation to Africa’s long history of intercultural encounters, including materials dating back to the 1880s and the 1930s. Stephanie Newell

AMST 280b, History of Housing in America Introduction to political, economic, and cultural trends that have shaped housing in American cities and suburbs since the nineteenth century. Focus on housing reform, housing policy, and the physical spaces in which class, race, and gender identities are constructed and contested. Topics include tenement reform, suburbanization, urban renewal, public housing, homelessness, and New Urbanism. Staff

AMST 359a/AFAM 377a/FILM 424a, Urban Narratives of Injustice in The Wire Narratives of injustice, crime, and the policing of citizens as represented in The Wire, critically acclaimed as the finest television drama ever made, plus additional readings. Hazel Carby

AMST 431a, Planning Chicago Chicago as central to the American economy and geography, national policymaking and demographic shifts, and our cultural imagination. Contemporary and historical urban plans and policies, from nineteenth-century efforts to reverse the flow of the Chicago River to recent proposals for the Obama Presidential Library. Topics include City Beautiful, public housing, urban renewal, immigration, creative placemaking, postindustrial redevelopment, and policing. Chloe Taft

AMST 435b/ENGL 430b, American Culture and the Rise of the Environment U.S. literature from the late eighteenth century to the Civil War explored in the context of climate change. Development of the modern concept of the environment; the formation and legacy of key ideas in environmentalism; effects of industrialization and national expansion; utopian and dystopian visions of the future. Michael Warner

AMST 433b, American Wastelands and Political Ecology Plans for the rehabilitation and reuse of natural and built environments in contemporary America placed in cultural, historical, ecological, and political contexts. Readings from anthropology, environmental studies, history, political ecology, cultural geography, and urban planning. Topics include brownfield redevelopment, environmental justice, heritage tourism, “ruin porn,” fracking, meth labs, and casinos. Chloe Taft

AMST 475b/HIST 113b, Cultural Capital: New York in the Twentieth Century An interdisciplinary study of New York City as a global cultural capital in the twentieth century. Social, political, and economic forces shaping the principal institutions of the city’s patrician, popular, and mass cultures. The formation of identifiably “New York” styles in the arts, architecture, photography, literature, and film. The changing geography of cultural creation, reproduction, and distribution in the city. Jean-Christophe Agnew

AMST 476b/HIST 724b, Research Seminar in U.S. Urban History Students conduct archival research to write an original, article-length essay on any aspect of U.S. urban history in any century. The first half of the seminar consists of weekly readings and discussions while the latter half consists of article workshop meetings focused on student writing. Mary Lui

ANTH 375a, Hubs, Mobilities, and the Global Urban Analysis of urban life in historical and contemporary societies. Topics include capitalist and postmodern transformations, class, gender, ethnicity, migration, and global landscapes of power and citizenship. Helen Siu

BRST 198b, Chaucer and Medieval London Chaucer’s writings explored through the human and physical landscape of medieval London and Westminster. The crowds, sounds, and visual stimuli of the city examined alongside literary genres in which the author wrote, including dream visions, love epic, and lyrics, as well as the comic, satiric, and religious narratives of his Canterbury Tales. Chaucer’s sense of the writer’s craft as a means of imagining space and sound and of depicting the emotional resonance of urban street scenes. Ardis Butterfield
CPLT 589b/GMAN 643b, Walter Benjamin and the Modernization of Nineteenth-Century Paris The radical modernization of Paris under the Second Empire (1851–70) as seen through the eyes of Walter Benjamin. Focus on Benjamin’s Arcades Project, a compendium that charted developments such as Parisian mass transit and streamlined traffic, the construction of apartment houses, and the dissemination of mass media. Readings from other literary texts on the same events include works by Balzac, Zola, and Aragon. Henry Sussman

F&ES 520a/ANTH 581a, Society and Environment: Introduction to Theory and Method This is an introductory course on the scope of social scientific contributions to environmental and natural resource issues. Section I presents an overview of the field and course. Section II deals with the way that environmental problems are initially framed; case studies focus on placing problems in their wider political context, new approaches to uncertainty and failure, and the importance of how the analytical boundaries to resource systems are drawn. Section III focuses on questions of method, including the dynamics of working within development projects, and the art of rapid appraisal and short-term consultancies. Section IV is concerned with local peoples, resources, and (under) development, with case studies addressing issues of representing the poor, development discourse, and the question of indigenous peoples and knowledge. There will be several guest lectures by leading contributors to the field. No prerequisites. This is a Foundations course in F&ES, a core course in the joint F&ES/Anthropology doctoral degree program, and a prerequisite for F&ES 869b/ANTH 572b. Three hours lecture/seminar. Michael R. Dove

F&ES 788b, Applied Urban Ecology Ecology is being transformed from a field historically disengaged from the human built environment to one that can provide insight into the understanding, design, and management of the constructed world. Urban ecology is central in this transformation. Urban ecologists are expanding their focus from “ecology in cities,” where they studied urban flora and fauna, to the “ecology of cities,” where they study human-biological interactions while also increasing their attention to the complex interplay among people, society, and environment. This reorientation has also catalyzed action-oriented initiatives. This course examines the current developments in urban ecology and looks at the transformative role it can play in shaping and managing urban environments. To this end, we examine fundamental issues in theory and practice that challenge the current understanding of urban ecosystems and that question the relationship between science and action in urban ecology. We also look at limitations and opportunities for conducting urban ecological research as well as methods specific to urban sites. The course includes fieldwork augmented with an overview of current literature in urban ecology, focusing on issues relating to science, application, advocacy, and contemporary concepts of stewardship. The final project includes an urban ecological design proposal and supporting research paper. Alexander J. Felson

F&ES 875a, Seminar on Land Use Planning This course explores the challenges and opportunities faced by America’s suburban communities and urban centers as they work to become more sustainable and livable. Land use plans, private development, and public infrastructure shape our communities and determine where and how development occurs. The form of our cities and towns dictates our ability to meet the nation’s housing demand and grow our employment while reducing greenhouse gas emissions, improving the environment, and enhancing quality of life. Planners play a key role in understanding trends, crafting policy solutions, and generating support for action through stakeholder engagement. While most land use decision making is local, the majority of the challenges and opportunities we face cross political boundaries. New regional policies and partnerships, coupled with consensus-building across diverse constituencies, will be necessary to realize a new way to build our communities for the twenty-first century. This course delves into the planning techniques, zoning tools, and other land use regulations that are the principal mechanisms employed to achieve safe, livable, and sustainable communities. This course is part of the concentration in land use and planning, a subset of four classes under the specialization in sustainable land management. This subset is for students interested in the interface of environmental issues with land use, planning, and development. The other three courses in the subset are F&ES 775b, 820b, and 835a. Enrollment limited to twenty-five. David Kooris

F&ES 820b, Land Use Law and Environmental Planning This course explores the regulation by local governments of land uses in urban, rural, and suburban areas and the effect of development on the natural environment. The course helps students understand, in a practical way, how the environment can be protected through effective regulation at the local level. It introduces students to federal, state, and regional laws and programs that affect watershed protection and to the laws that delegate to local governments primary responsibility for decision making in the land use field. Theories of federalism, regionalism, states’ rights, and localism are studied. The history of the delegation of planning and land use authority to local governments is traced, leading to an examination of local land use practices particularly as they relate to controlling development in and around watershed areas as well as regulatory response to sea-level rise and climate change. Course participants engage in empirical research working to identify, catalogue, and evaluate innovative local laws that successfully protect environmental functions and natural resources, and the manner in which towns, particularly on the coast, incorporate climate change into their planning and regulations. Nearby watersheds are used as a context for the students’ understanding of the strengths and weaknesses of local planning and regulation. Attention is paid, in detail, to how the development of the land adversely affects natural resources and how these impacts can be mitigated through local planning and subsequent adoption of environmental regulations and regulations designed to promote sustainable development in a climate-changing world. The course includes examination of the state and local response to climate change, sea-level rise, growth management, alternatives to Euclidean zoning, low-impact development, brownfields redevelopment, energy conservation, and innovative land use strategies. Marjorie Shansky

F&ES 835a, Seminar on Land Use Planning Land use control exercised by state and local governments determines where development occurs on the American landscape, the preservation of natural resources, the emission of greenhouse gases, the conservation of energy, and the shape and livability of cities and towns. The exercise of legal authority to plan and regulate the development and conservation of privately owned land plays a key role in meeting the needs of the nation’s growing population for housing and nonresidential development and in ensuring that critical environmental functions are protected from the adverse impacts of land development. This course explores the multifaceted discipline of land use planning and its associated ecological implications.
Numerous land use strategies are discussed that provide practical tools for professionals to use to create sustainable buildings, neighborhoods, and communities. The focus of this seminar is to expose students to the basics of land use planning in the United States and to serve as an introduction for the F&ES curricular concentration in land use. Guest speakers are professionals involved in sustainable development, land conservation, smart growth, and climate-change management. Classes include discussions on the trajectory for professional careers. John R. Nolon

F&ES 85ga, Climate Change Mitigation in Urban Areas This class provides an in-depth assessment of the relationships between urbanization and climate change, and the central ways in which urban areas contribute to greenhouse gas emissions and climate change; and (2) the ways in which urban areas can mitigate greenhouse gas emissions and climate change. Class topics parallel the IPCC 5th Assessment Report, Chapter 12, Human Settlements, Infrastructure, and Spatial Planning, and include spatial form and energy use, land use planning for climate mitigation, urban metabolism, and local climate action plans. The class format is reading-, writing-, and discussion-intensive. Students are taught how to synthesize scientific literature, write policy memos, and develop effective oral presentations on the science of climate change mitigation in urban areas. Enrollment limited to sixteen. Karen Seto

F&ES 954a, Management Plans for Protected Areas A seminar that comprises the documentation of land use history and zoning, mapping and interpretation, and the collection and analysis of socioeconomic, biological, and physical information for the construction of management plans. Plans are constructed for private smallholders within the Quiet Corner Initiative partnership managed by the Yale School Forests. In the past, plans have been completed for the Nature Conservancy; Massachusetts Trustees of Reservations; town land trusts; city parks and woodlands of New Haven, New York, and Boston; and the Appalachian Mountain Club. Prerequisite: F&ES 650b or 660a, or permission of the instructor. Ten days fieldwork. Enrollment limited to twenty. Mark S. Ashton

F&ES 971b, Land Use Clinic This clinic explores a variety of specific community land use topics of current concern and relevance to the field, to the curriculum, and to society. Potential project topics include renewable energy, natural resources, rural-based land uses, agriculture, and sustainable urban planning. Students work with the instructor to develop papers, research memorandums, and publications on a selected topic. The instructor or guest speakers lecture on specific topics related to student projects. Additionally, students attend field trips relevant to the curriculum and may participate in project meetings with clients. Students select from a project list or meet with the instructor to design a relevant project. Jessica Bacher

F&ES 976b, Cities in Hot Water: Urban Climate Mitigation and Adaptation This capstone class works in partnership with the City of New Haven to analyze and make recommendations for how city planners and engineers should cope with heat stress and extreme rainfalls in current and future climate conditions. Higher temperatures and larger rainfall variability are the two most severe climate stresses predicted to impact the Northeastern part of the United States. The situation is worsened in urban centers owing to the urban heat island effect and concentrated stormwater runoff. Students are divided into teams, with each team consisting of members with complementary skills. Each team works closely with city partners, as well as staff in the Yale Office of Sustainability, the Community Alliance for Research and Engagement in the School of Public Health, and the Urban Resources Initiative in F&ES. Specific tasks include inventorying the efforts already under way in New Haven to prepare for changes in climate; reviewing existing urban climate strategies in major cities around the world; quantifying the likely range of severity of future climate stresses in the New Haven region; and identifying the impacts of these stressors on the lives of local residents. The final deliverable of the class is a detailed urban climate mitigation and adaptation plan for the City of New Haven, with a special emphasis on addressing the health impacts of heat stress and increased flooding. Students may also have the opportunity to participate in field implementation of one or more mitigation actions. Assessment of student performance is based on class participation, class presentations, writing assignments, client feedback, and peer evaluations. Enrollment limited to twenty. Xuhui Lee, Bradford S. Gentry

HIST 366a, History of Cities in Modern Asia The history of Asian cities, with emphasis on long-term processes of urbanization and the daily life of hundreds of millions of people. Focus on China, now home to six of the world’s thirty largest cities. Includes discussion of Japan, India, and related areas as well. Peter Perdue and Mark Baker

HIST 649a, Emergence of Modern Paris This reading and discussion course emphasizes the evolution of modern Paris since the late Ancien Régime to the present. Salient themes include the concomitants of population increase; the emerging social geography of nineteenth-century Paris, center and periphery; radical political challenges; the literature and painting of changing Parisian life; migration and mobility; Paris during the World Wars; and urban form and planning. A knowledge of French is helpful but not absolutely necessary. John Merriman

HIST 848b, Urban Places, Contested Spaces: Cities of the Middle East This seminar examines how cities have been planned and inhabited, stratified and resisted, destroyed and reimaged. We aim to better understand how urban environments are defined by the populations that inhabit them, move through them, and depart them. Conversely, we examine how space influences identity politics, nation and state building, social life and cultural production. This course explores how identity and urban space functioned symbiotically from the nineteenth to the twenty-first century, a period of rapidly increasing global contact, colonial expansion and studies, urban studies, and architecture. A significant proportion of the material is on the Middle East and North Africa, but the readings draw on several Asian and Western cities. Rosie Bsheer

LAW 20202, Property, Social Justice, and the Environment Private property is sometimes cast as the villain in social and environmental problems, but sometimes it is cast as the solution to the same problems. This seminar will explore the relationship of property to social and environmental concerns in the context of several past and present controversies over property rights, and particularly in the light of current concerns with climate change. We will begin with some basic theories about the “commons” problem and the ways that property rights do or do not evolve to address that problem. Time permitting, other topics may include: land rights, land reform, and development projects (primarily...
less developed countries); wildlife and fisheries management (global); water management (United States and global); tradable pollution rights (United States); carbon trading schemes and other less conventional approaches to climate change management; property aspects of climate change adaptation; free-market environmentalism and private land use restrictions (conservationist or exclusionary?) (United States and global); and indigenous land claims and claims to intellectual property (global). While we will search for common themes about the range, capacities, and limitations of property regimes, theoretical purity should not be expected in this overview; moreover, topics may change in response to particular student interest. The class will meet twice weekly during the first seven to eight weeks of the term. Paper required; may be reflective (2 units) or research (3 units). Enrollment limited to eighteen. C.M. Rose

LAW 20377, Property Law and informal norms combine to create the bedrock institutions that govern human entitlements in scarce resources. Land will be a principal focus of the course, but attention also will be given to other resources, such as wild animals, labor, water, the electromagnetic spectrum, and intellectual property. A regime of private property in a particular resource will be compared to alternative regimes such as communal, open-access, and state-owned property. At maximum, a private owner of a resource has a right to exclude, a privilege of use, and a power of transfer. The many legal limitations on these powers, such as public accommodations laws, will be explored. The course will address the temporal division of property interests, co-ownership arrangements, and ownership by a managing entity such as a landlord or trust. Toward the end of the term, urban and public-law issues will take center stage. Topics will include housing policy, the constitutional rights of property owners, and the regulation of land uses through nuisance law, easements and covenants, and municipal zoning. Scheduled examination. R.C. Ellickson

LAW 30103/30131, Community and Economic Development Clinic and Fieldwork Credit/fail or graded, at student option. The clinic and fieldwork must be taken simultaneously. CED explores the role of lawyers and the law in building wealth and opportunity in low-income communities. The clinic focuses on issues of neighborhood revitalization, social entrepreneurship, sustainable development, and financial inclusion as they relate to community and economic development. Students in CED represent and partner with community organizations, nonprofits, community development financial institutions, neighborhood associations, and small foundations. These client organizations share an interest in promoting economic opportunity and socioeconomic mobility among low- and moderate-income people. Students will represent clients in a range of legal matters including formation and governance of for-profit, not-for-profit, and hybrid entities, negotiating and drafting contracts, developing employment and other policies, structuring real estate transactions, resolving zoning and environmental issues, providing tax advice, drafting and advocating for legislation, and appearing before administrative agencies. CED engages students in local work that can then be used to inform policy development at the local, state, and federal levels. Students will gain skills in client contact, contract drafting, transactional lawyering, legal research and writing, regulatory and legislative advocacy, administrative agency contact, and negotiation. The class seminar will meet once a week for two hours and once a week for one hour and will cover federal, state, and local policies affecting urban and suburban places; substantive law in tax, real estate development, and corporate governance; and transactional and regulatory lawyering skills, such as negotiating and drafting contracts. Each student will meet with faculty once a week for fieldwork supervision. The clinic is open to students from the Schools of Law, Management, Divinity, Forestry & Environmental Studies, Public Health, and Architecture with prior approval from a faculty member. Permission of the instructors required. Enrollment limited to eight. A.S. Lemar and C.F. Muckenfuss III

LAW 30104, Advanced Community and Economic Development Clinic Credit/fail, with a graded option. Open only to students who have completed the Community and Economic Development Clinic. Permission of the instructors required. A.S. Lemar and C.F. Muckenfuss III

LAW 30164, Environmental Protection Clinic Credit/fail. A clinical seminar in which students will be engaged with actual environmental law or policy problems on behalf of client organizations (environmental groups, government agencies, international bodies, etc.). The class will meet weekly, and students will work ten to twelve hours per week in interdisciplin ary groups (with students from the School of Forestry & Environmental Studies and other departments or schools at Yale) on projects with a specific legal or policy product (e.g., draft legislation or regulations, hearing testimony, analytic studies, policy proposals). Students may propose projects and client organizations, subject to approval by the instructor. Brief statement of interest required; please e-mail joshua.galperin@yale.edu for information. Enrollment limited to thirty. J.U. Galperin, D. Hawkins, and L. Suatoni

MGT 536b, Urban Poverty and Economic Development Kate M. Cooney

MGT 895a, International Real Estate Kevin Gray

NELC 514a, Buried Cities: Thera, Pompeii, and Herculaneum Study of three ancient cities buried by volcanic eruptions – Thera in ca. 1500 B.C.E. and Pompeii and Herculaneum in 79 C.E. – with emphasis on their architecture, wall paintings, and small finds in cultural and historical context. Karen Foster

PLSC 245a/AFAM 268a, Urban Politics and Policy Approaches to urban politics and political economy. Application of theories to contemporary policy issues such as policing, metropolitan disparities, and inner-city revitalization. Cynthia Horan

PLSC 280b/AFAM 270b, Poverty, Politics, and Policy in the American City Examination of how politics informs the formulation and implementation of policies to address urban poverty. Consideration of alternative explanations for poverty and alternative government strategies. Focus on efforts by local organizations and communities to improve their situations within the context of government actions. Cynthia Horan

SO CY 357a, Neighborhoods and Crime The “city problem” of crime contrasted in a variety of neighborhoods; reasons why some neighborhoods have higher rates of crime than others. Topics include street gangs, the underground economy, immigration, and mass incarceration. Attention to ecological, social structural, and cultural aspects of city life. Andrew Papachristos