ARCHITECTURE (ARCH)

* ARCH 006a, Architectures of Urbanism: Thinking, Seeing, Writing the Just City  Michael Schlabs
What is architecture, and how is it conceived, relative to notions of the urban – to the broader, deeper, messier web of ideas, forms, and fantasies constituting “the city?” Can architecture play a role in defining the city, as such, or does the city’s political and social construction place it outside the scope of specifically architectural concerns? Likewise, what role can the city play in establishing, interrogating, and extrapolating the limits of architecture, whether as a practice, a discourse, or a physical manifestation of human endeavor in the material environment? This course addresses these and other, related questions, seeking to position art and architecture in their broader urban, social, cultural, political, intellectual, and aesthetic contexts. It explores issues of social justice as they relate to the material spaces of the modern city, and the manner in which those spaces are identified, codified, and made operative in service of aesthetic, social, and political experience. Enrollment limited to first-year students. Preregistration required; see under First-Year Seminar Program. Prerequisite: general knowledge of 20th-century history. HU

ARCH 150a, Introduction to Architecture  Alexander Purves
Lectures and readings in the language of architecture. Architectural vocabulary, elements, functions, and ideals. Notebooks and projects required. Not open to freshmen. Required for all Architecture majors. HU

* ARCH 154b, Drawing Architecture  George Knight
Introduction to the visual and analytical skills necessary to communicate architectural ideas. Observation and documentation of architectural space on the Yale campus. Drawing exercises introduce the conventions of architectural representation: plan, section, elevation, and isometric drawings, as well as freehand perceptual drawings of architectural space. Open to first and second year students.

* ARCH 161a, Introduction to Structures  Erleen Hatfield
Basic principles governing the behavior of building structures. Developments in structural form combined with the study of force systems, laws of statics, and mechanics of materials and members and their application to a variety of structural systems. Prerequisites: trigonometry and some knowledge of calculus. Enrollment limited to 20. QR, SC

* ARCH 162b, Materials in Architecture  Timothy Newton
Science and technology of basic building materials studied together with historic and current design applications. Skills and processes required to create, shape, and connect materials experienced through hands-on projects. Technical notebooks, drawings, design and build exercises, and projects required. Enrollment limited to 20.

ARCH 200b / URBN 200b, Scales of Design  Bimal Mendis
Exploration of architecture and urbanism at multiple scales from the human to the world. Consideration of how design influences and shapes the material and conceptual spheres through four distinct subjects: the human, the building, the city, and the world. Examination of the role of architects, as designers, in constructing and shaping the inhabited and urban world. Lectures, readings, reviews and four assignments that address the spatial and visual ramifications of design. Not open to first-year students. Required for all Architecture majors. HU

* ARCH 230b / STCY 176b / URBN 230b, Introduction to the Study of the City  Alexander Garvin
An examination of forces shaping American cities and strategies for dealing with them. Topics include housing, commercial development, parks, zoning, urban renewal, landmark preservation, new towns, and suburbs. The course includes games, simulated problems, fieldwork, lectures, and discussion. SO

* ARCH 250a, Methods and Form in Architecture I  Katherine Davies
Analysis of architectural design of specific places and structures. Analysis is governed by principles of form in landscape, program, ornament, and space, and includes design methods and techniques. Readings and studio exercises required. Enrollment limited to 25. Open only to Architecture majors. 1½ Course cr

* ARCH 251b, Methods and Form in Architecture II  Staff
Continuation of ARCH 250. Analysis of architectural design of specific places and structures. Analysis is governed by principles of form in landscape, program, ornament, and space, and includes design methods and techniques. Readings and studio exercises required. 1½ Course cr

ARCH 260a / HSAR 326a, History of Architecture: Antiquity to the Baroque  Kyle Dugdale
The history of architecture from antiquity to the dawn of the Enlightenment, beginning in Africa and the Middle East, following trade routes from the Mediterranean into Asia and back to Rome, Byzantium, and the Middle East, and then circulating back to Europe, before finally juxtaposing the indigenous structures of Africa and America with the increasingly global fabrications of the Renaissance and Baroque. Emphasis on challenging preconceptions, developing visual intelligence, and learning to read architecture as a shared cultural expression that can both register and transcend place and time, embodying immaterial ideas within material structures that survive across the centuries in often unexpected ways. HU

* ARCH 270b / HSAR 266b / MMES 126b / SAST 266b, Introduction to Islamic Architecture  Kishwar Rizvi
Introduction to the architecture of the Islamic world from the seventh century to the present, encompassing regions of Asia, North Africa, and Europe. A variety of sources and media, from architecture to urbanism and from travelogues to paintings, are used in an attempt to understand the diversity and richness of Islamic architecture. Field trip to the Metropolitan Museum of Art in New York. HU
ARCH 280b / AMST 197b / HSAR 219b / URBN 280b, American Architecture and Urbanism  Elihu Rubin
Introduction to the study of buildings, architects, architectural styles, and urban landscapes, viewed in their economic, political, social, and cultural contexts, from precolonial times to the present. Topics include: public and private investment in the built environment; the history of housing in America; the organization of architectural practice; race, gender, ethnicity and the right to the city; the social and political nature of city building; and the transnational nature of American architecture. HU

ARCH 312a / HSAR 312a, Modern Architecture in a Global Context, 1750-present  Craig Buckley
Architects, movements, and buildings central to the development of modern architecture from the mid eighteenth century through to the present. Common threads and differing conceptions of modern architecture around the globe. The relationship of architecture to urban transformation; the formulation of new typologies; architects' responses to new technologies and materials; changes in regimes of representation and media. Architects include Claude Nicolas Ledoux, Giovanni Battista Piranesi, John Soane, Frank Lloyd Wright, Le Corbusier, Ludwig Mies van der Rohe, Lina Bo Bardi, Louis Kahn, and Kenzo Tange. HU

* ARCH 314b / URBN 314b, History of Landscape in Western Europe and the United States: Antiquity to 1950  Warren Fuermann
This course is designed as an introductory survey of the history of landscape architecture and the wider, cultivated landscape in Western Europe and the United States from the Ancient Roman period to mid-twentieth century America. Included in the lectures, presented chronologically, are the gardens of Ancient Rome, medieval Europe, the early and late Italian Renaissance, 17th century France, 18th century Britain, 19th century Britain and America with its public and national parks, and mid-twentieth century America. The course focuses each week on one of these periods, analyzes in detail iconic gardens of the period, and places them within their historical and theoretical context. HU RP

* ARCH 316a / URBN 416a, Revolutionary Cities: Protest, Rebellion and Representation in Modern Urban Space  Alan Plattus
Cities have always been hotbeds of radical ideas and actions. Their cafes and taverns, drawing rooms and universities have been incubators of new ideas, revolutionary ideologies and debate, while their streets and public spaces have been the sites of demonstrations, protests, and uprisings. Since cities are key nodes in larger networks of trade and cultural exchange, these local events have often had a global audience and impact. This seminar explores the interaction of urban space and event, and the media and technologies of revolutionary representation, through case studies of particular cities at transformational moments in their development. These begin with Boston in the 1760s and 1770s, and may include Paris in 1789, 1830, 1848, 1871 and again in 1968, St. Petersburg in 1917, Beijing in 1949 and again in 1989, Havana in 1959, Prague, Berlin and Johannesburg and other cities in 1989, Cairo in 2011, Hong Kong in 2011-12, 2014 and 2019, and other urban sites of the Occupy and Black Lives Matter movements. Course work in modern history is recommended. HU

* ARCH 324b / SAST 384b / URBN 324b, The City Before and After the Tubewell  Anthony Acciavatti
What do such disparate cities as New Delhi, Jakarta, Mexico City, and Phoenix all have in common? In short, each city relies on a fantastic technology that few people know anything about but has transformed the shape and life of cities and their hinterlands: the tubewell. Technologies for drawing up groundwater, tubewells are used in places where municipal water supply is non-existent, unreliable, or often polluted. A minor technology with a global reach, the tubewell is to the city what the elevator was to the skyscraper in the booming American metropolis of the early twentieth century. In this course we look at how tubewells and other decentralized technologies have radically transformed urban and agricultural spaces across the globe since the nineteenth century to the present. We watch how people exult before these technologies; we witness how governments and philanthropies as well as farmers and townspeople appropriate them for radically different ends. And we consider why. HU

* ARCH 330b, Creativity, Innovation, and “The New”  Mark Gage
This seminar explores the role of “The New” in the design of our world. Through exploring the history of newness as an idea, its current understanding within philosophy, and examining its understanding in multiple creative fields today including art, architecture, product design, social microcultures, cars, food, fashion, and toys, students gain both knowledge about the role of “The New” in human society and are exposed to cutting-edge ideas in multiple disciplines. Through the study of emerging creative trends, detailed historic case studies, both philosophical and popular readings, and engaged group discussion we examine the very concept of “The New” from all possible angles—what it is, its history, why it is desired, the motivations of those that produce and promote it, who profits from it, and the morality of its continued rehearsal in a world with evolving ethics regarding the use of human labor and natural resources in the production of things. This course encourages students to consider these positions through not only research, presentations and discussion, but also speculative ‘making’ that challenges students to address the subject of “The New” themselves—through the very process of design. No particular skills or previous exposure to the design world is required. HU

* ARCH 341b / GLBL 253b / LAST 318b / URBN 341b, Globalization Space  Keller Easterling
Infrastructure space as a primary medium of change in global policy. Networks of trade, energy, communication, transportation, spatial products, finance, management, and labor, as well as new strains of political opportunity that reside within their spatial disposition. Case studies include free zones and automated ports around the world, satellite urbanism in South Asia, high-speed rail in Japan and the Middle East, agripoles in southern Spain, fiber optic submarine cable in East Africa, spatial products of tourism in North Korea, and management platforms of the International Organization for Standardization. HU

ARCH 345a / URBN 345a, Civic Art: Introduction to Urban Design  Alan Plattus
Introduction to the history, analysis, and design of the urban landscape. Principles, processes, and contemporary theories of urban design; relationships between individual buildings, groups of buildings, and their larger physical and cultural contexts. Case studies from New Haven and other world cities. HU
* ARCH 360b / URBN 360b, Urban Lab: An Urban World  Staff
Understanding the urban environment through methods of research, spatial analysis, and diverse means of representation that address historical, social, political, and environmental issues that consider design at the scale of the entire world. Through timelines, maps, diagrams, collages and film, students frame a unique spatial problem and speculate on urbanization at the global scale. Prerequisites: For non-majors: permission of the instructor is required. For ARCH majors: ARCH 150, 200, and 280.  HU  1½ Course cr

* ARCH 362a / URBN 362a, Urban Lab: City Making  Anthony Acciavatti
How architects represent, analyze, construct, and speculate on critical urban conditions as distinct approaches to city making. Investigation of a case study analyzing urban morphologies and the spatial systems of a city through diverse means of representation that address historical, social, political, and environmental issues. Through maps, diagrams, collages and text, students learn to understand spatial problems and project urban interventions. Prerequisites: For non-majors: permission of the instructor is required. For ARCH majors: ARCH 150, 200, and 280.  1½ Course cr

* ARCH 450a, Senior Studio  Anne Barrett
Advanced problems with emphasis on architectural implications of contemporary cultural issues. The complex relationship among space, materials, and program. Emphasis on the development of representations—drawings and models—that effectively communicate architectural ideas. To be taken before ARCH 494. Enrollment limited to Architecture majors.  1½ Course cr

* ARCH 471b, Individual Tutorial  Michael Schlabs
Special courses may be established with individual members of the department only. The following conditions apply: (1) a prospectus describing the nature of the studio program and the readings to be covered must be approved by both the instructor and the director of undergraduate studies; (2) regular meetings must take place between student and instructor; (3) midterm and final reviews are required. For seniors with DUS approval; meetings by appointment with DUS.

* ARCH 472a, Individual Tutorial Lab  Michael Schlabs
RP  ½ Course cr

* ARCH 472La, Individual Tutorial Laboratory  Michael Schlabs
An independent tutorial focusing on methods and techniques of representation in architecture, including the synthesis of studio work using a variety of visual media. Concurrently with ARCH 471 or after a spring term abroad.  RP  ½ Course cr

* ARCH 490a / URBN 490a, Senior Research Colloquium  Marta Caldeira
Research and writing colloquium for seniors in the Urban Studies and History, Theory, and Criticism tracks. Under guidance of the instructor and members of the Architecture faculty, students define their research proposals, shape a bibliography, improve research skills, and seek criticism of individual research agendas. Requirements include proposal drafts, comparative case study analyses, presentations to faculty, and the formation of a visual argument. Guest speakers and class trips to exhibitions, lectures, and special collections encourage use of Yale’s resources.

* ARCH 491b / URBN 491b, Senior Project  Marta Caldeira
An essay or project in the student’s area of concentration. Students in the history, theory, and criticism track or in the urban studies track pursue independent research with an adviser; this project must terminate in a senior essay.

* ARCH 494b, Senior Project Design Studio  Gavin Hogben
Individual design investigations, focusing on independence and precision in the deployment of design ideas. Reliance on visual and nonverbal presentations. Development of a three-dimensional component, such as large-scale mock details, or other visual means of presentation, which might include photography, film, video, or interactive media. Examination of the skills, topics, and preparation to support design research.  1½ Course cr